THE MAGAZINE DESIGNED FOR ALL RAILWAY HOBBYISTS

THE AUSTRALASIAN MODEL RAILROAD MAGAZINE

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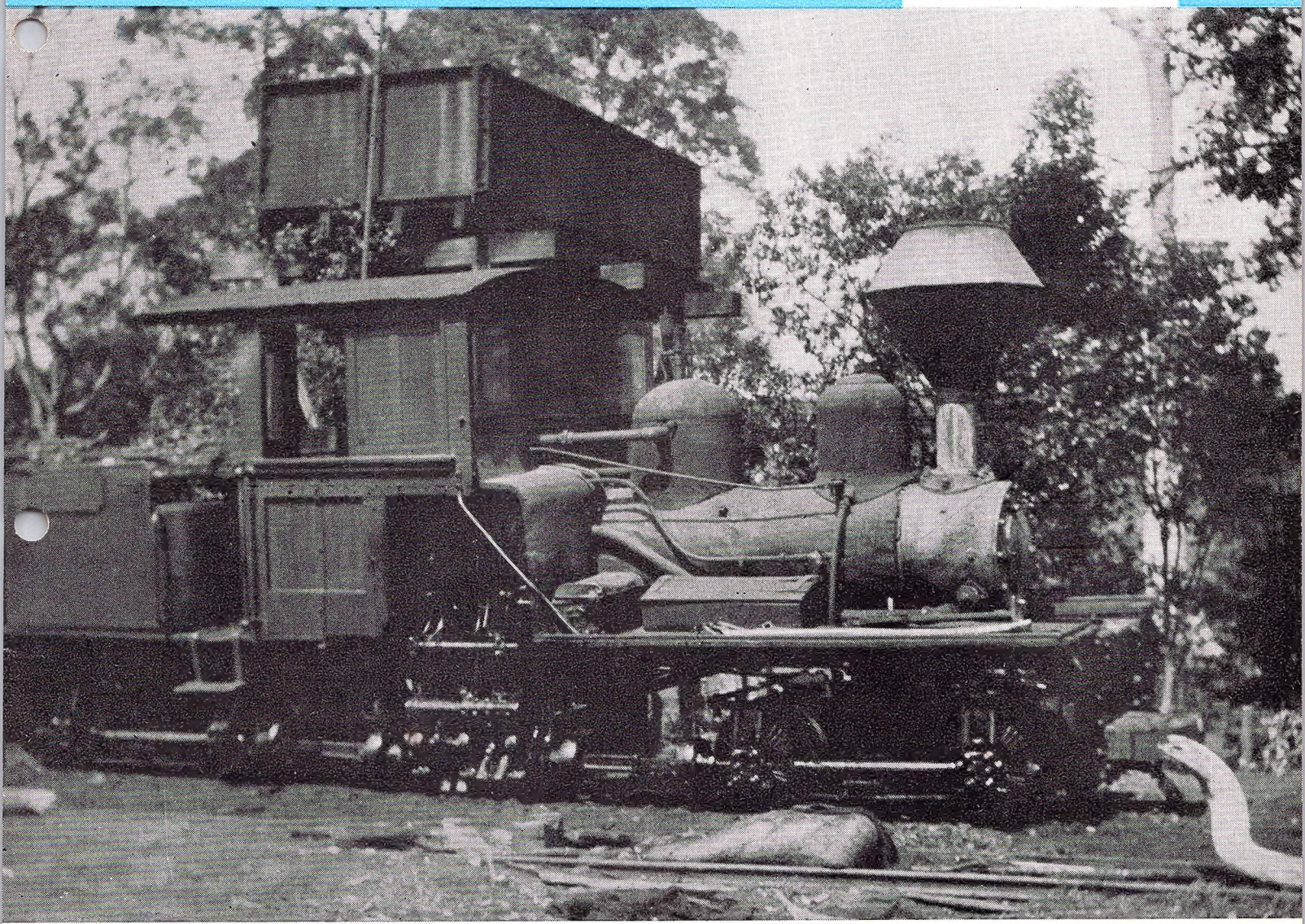


Features include:

- CONTROL PANEL WIRING
- BIG REVIEW SECTION
- BUILDING V.R. Tt CLASS CARS

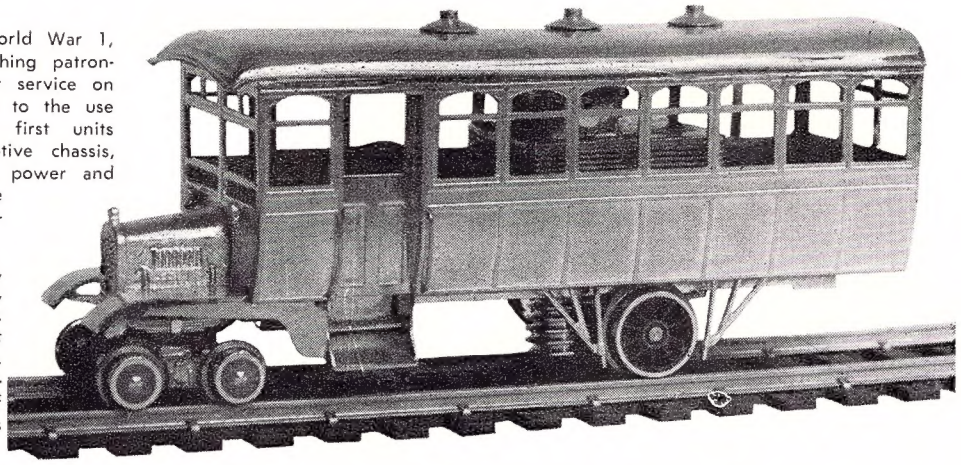
RAIL MOTOR CARS . . .

THE IDEAL EQUIPMENT FOR BRANCH LINE OR LOCAL SERVICE

BRILL-MACK RAIL MOTOR:

Around about the outbreak of World War 1, many railways, faced with diminishing patronage and rising costs of passenger service on branch line and local runs, turned to the use of self-propelled rail cars. The first units being built on converted automotive chassis, with direct drive, whilst capacity, power and refinement came later with the development of petrol-electric transmission.

Logically interested in this field, J. G. Brill and Co., of Philadelphia, U.S.A., the world's largest electric railway car builders, were amongst the first to offer suitable products. Body construction — closely following current tram-car design of the day, with curved side panels and divided upper sash.



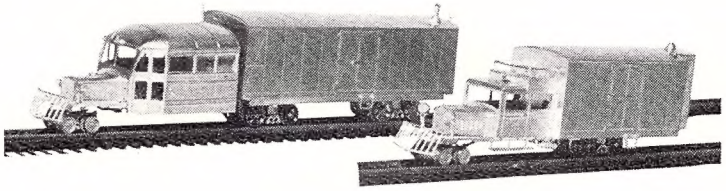
In selecting one of these original type 'motor cars' for production in HO scale, Kumata wisely chose a classic from Brill records. A 1921 model constructed for a number of roads, as well as for the U.S. Army.

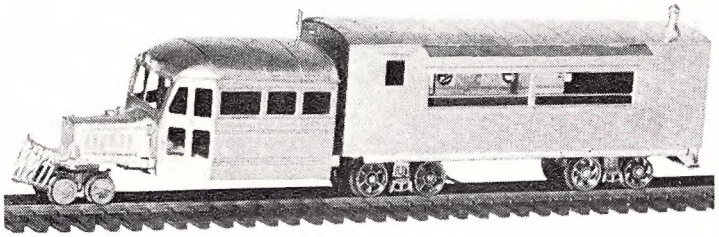
Finely executed, with etched brass body, embossed radiator and diminutive leading bogie, the model has doors arranged for both left and right-hand running. Measuring 3½" overall, the Rail Motor comes unpainted, ready-to-run. **PRICE: $15.95.**

ALSO NOW AVAILABLE IN HOn3 — WITH ADDED REFINEMENTS! **PRICE: $18.90**

The ingenuity of the master mechanic was often greater than the funds of many a branchline or mill type railway, so that rather than purchase a suitable commercial product, many rail motors were the result of 'converted' buses and other automotive vehicles.

Amongst the most famous 'conversions' were the "Galloping Geese" of the Rio Grande Southern narrow gauge. The 'Geese were used to carry the mail, the odds and ends and the more hearty travellers throughout the Rockies, winning fame in early Colorado railroad history.





Balboa Scale Models, in conjunction with Kumata, have now come up with the three major versions of the "Galloping Geese" in HOn3: 3-Truck Passenger, 3-Truck Freight and 2-Truck Freight.

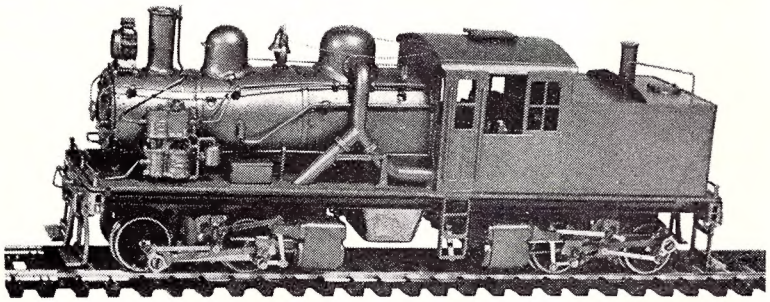
A wealth of U.S. investment castings have been especially made up to detail each model and we are proud to be able to offer these products in Australia at approximately the same prices as apply in the U.S.A.!

HOn3 2-Truck Freight "Galloping Goose", **$39.90**

HOn3 3-Truck Freight "Galloping Goose", **$42.60**

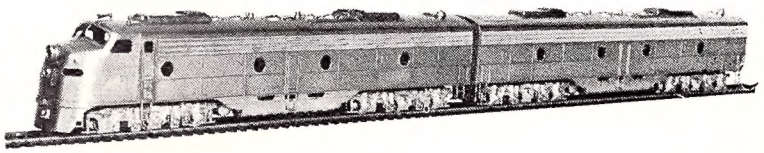
HOn3 3-Truck Pass. "Galloping Goose", **$42.60**

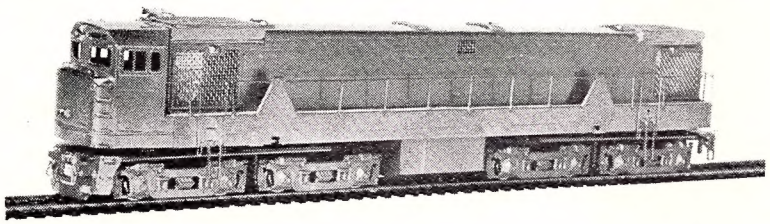
NEW OFFERINGS–
IN STEAMERS, DIESELS & ROLLING STOCK!



HO VULCAN DUPLEX: Perhaps the nearest the Americans have ever come to a Beyer-Garratt Locomotive! The 50 ton, Vulcan Duplex has now been accurately modelled by 'United'. Both trucks geared. Unpainted, ready-to-run. Overall length, 5⅜". Weight, 12 oz. **PRICE: $80.50.**

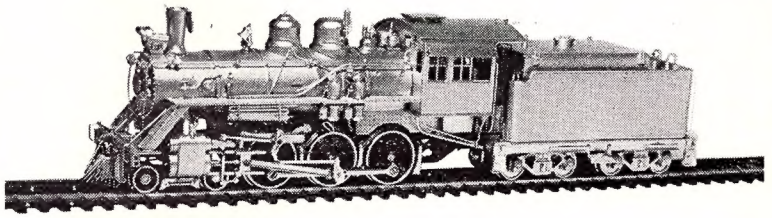
HO EMD 'E-9' A & B UNITS: Built by Kumata to the order of Trains Inc., these fine Diesels each come twin motored, giving the advantage of 4-motors in parallel, when coupled. High efficiency, low-drain performance is achieved by use of Type DM-125 Motors, each having a no-load drain of but 50m. Amps. Unpainted, ready-to-run. Overall length, 20". Weight, per unit, 1 lb. 6 ozs. **PRICE:** 'A' Unit, **$57.85**; 'B' Unit, **$56.25.**

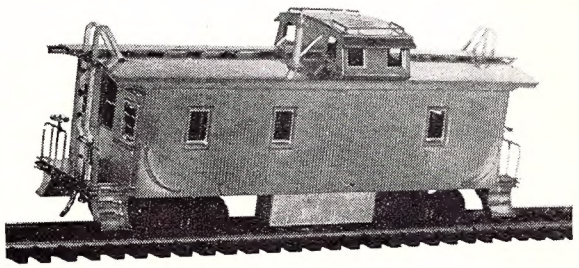




HO ALCO-G.E. 'U-50' HOOD UNIT: Introduced by Alco in 1963, these giant 85ft. U-50's found immediate favour handling heavy fast freight on several western (U.S.) roads. Equipped with four trucks, hinged by means of span bolsters, this massive and extremely interesting Locomotive has been recreated in HO scale by Kumata, to the order of Trains Inc. Twin motored and powered on all axles. Unpainted, ready-to-run. Overall length, 11⅜". Weight, 1 lb. 14 ozs. **PRICE: $70.00.**

HO A. & L.M. 4-6-0: Fully exemplifying Fujiyama's design excellence, this reproduction of Baldwin's light Ten-wheeler is a welcome addition to the range of medium traffic locomotives. Fitted with pre-blackened, sprung frame and castings by Cal-Scale. Unpainted, ready-to-run. Overall length, 7¾". Weight, 13ozs. **PRICE: $50.00**





HO U.P. WOOD CABOOSE: Fans of the U.P. have long wanted an authentic 'wood' Caboose of brass manufacture, similar to those already available for other roads. Kumata have now supplied the answer in this fine HO reproduction of the 'CA-1' type. Supplied less trucks. **PRICE: $12.75.**

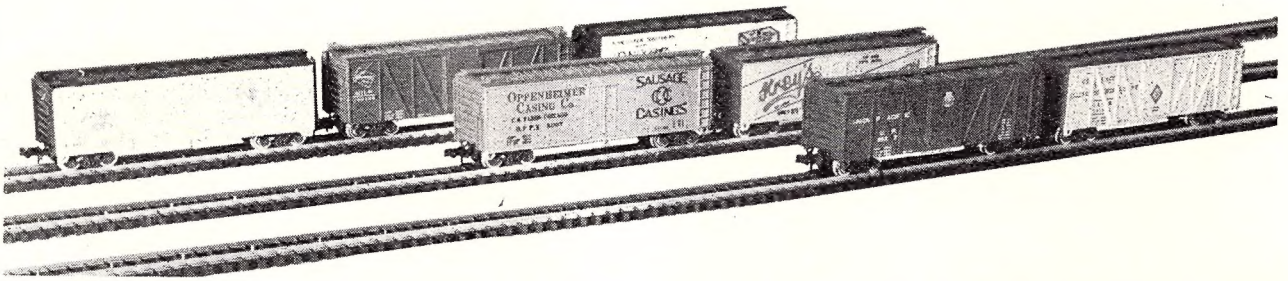
For Australia's Largest Model Railway Range!...

The MODEL DOCKYARD Pty. Ltd.

SOLE AGENT AND IMPORTER

216-218 SWANSTON STREET, MELBOURNE C.1. —— 32 3505

'SEKISUI' — THE MASTER CRAFTSMEN IN 'N' SCALE PROUDLY PRESENT U.S. PROTOTYPE FREIGHT CARS . . .



"THESE ARE UNDOUBTEDLY THE FINEST 'N' SCALE AMERICAN-PROTOTYPE CARS WE'VE SEEN SO FAR"
— "Model Railroader", October, 1967

IN STOCK (BUT GOING FAST)

40ft. AAR Box Car: S.F., G.N., Burlington, Erie Lackawana and Undecorated	$2.50 ea
40ft. Reefer Car: S.F., Pacific Fruit Express, Railway Express Agency, I.G.A. Food Stores and Undecorated	$2.50 ea
40ft. Cattle Car: S.F., G.N., U.P., P.R.R. and Undecorated	$2.50 ea
50ft. Flat Car: S.F., U.P., P.R.R., B. & O. and Undecorated	$2.20 ea
50ft. Gondola: Soo, N.Y.C., Burlington, S.P. and Undecorated	$2.25 ea
Bay Window Caboose: S.F., B. & O., S.P., P.R.R. and Undecorated	$3.25 ea

COMING SOON

40ft. Outside Braced Box Car: U.P., P.R.R., Chicago & Ill.Midl., Milwaukee Road and Undecorated	$2.75 ea
40ft. Wood Reefer: Krey's Ham-Bacon, Schlosser Bros., N.Y.C. Early Bird, Oppenheimer Casing Co., and Undecorated	$2.75 ea
50ft. Door-and-a-Half Box Car: S.P., G.N., N.Y.C., Burlington, Frisco and Undecorated	$2.75 ea
50ft. Welded-side, panel door Box Car: Soo Line, P.R.R., Spruce Falls Paper Mills, P. & L.E. (N.Y.C.), U.P. and Undecorated	$2.75 ea
Alco PA-1 "A" Unit Diesel Loco.: S.P., S.F., G.N. and P.R.R.	$15.75 ea
Variable Speed Controller with Reverse Switch, for connection to 12V. D.C. supply	$7.00

OTHER SEKISUI ITEMS PRESENTLY IN STOCK

Alco Diesel Locomotive, PA-1, "A" Unit (S.P., S.F., G.N. and P.R.R.)	
No. 201 J.N.R. 'C50' Class 2-6-0 Loco. & Tender	$25.00
No. 301 J.N.R. 'EF-70' Class 3-Truck Electric Locomotive	$15.25
No. 501 J.N.R. '31' Class Express Passenger Car	$5.40
J.N.R. '31' Class Express Combine Car	$5.40
No. 402 J.N.R. M.U. Motor Car, without cab	$12.25
No. 401 J.N.R. M.U. Trailer Car, with cab	$5.40
No. 403 J.N.R. M.U. Trailer Car, without cab	$5.40
No. 801 J.N.R. Bogie Open Wagon	$2.20
No. 802 J.N.R. Bogie Container Car	$2.50
No. 803 J.N.R. Bogie Container Car with Guards Compartment	$2.50

SPARES

(1C) Mounted pair of Drivers, with gear, to suit Loco. No. 201. With small counter-weight. 10.7 mm Diameter	$1.25 pr.
(1D) Mounted pair of Drivers, with gear, to suit Loco. No. 201. With large counter-weight. 10.7 mm Diameter	$1.25 pr.
(1E) Mounted pair of Drivers, without gear, to suit Loco. No. 201. With small counter-weight. 10.7 mm. Diameter	$1.00 pr.
(1F) Traction Motor No. MO-HA 103. 5 Pole 12V. D.C.	$3.50 ea.
(1G) Pedestal Passenger Truck, as fitted to Car No. 501. With Couplers & Draft Gear	$2.00 pr.
(1K) Bettendorf Freight Truck, as fitted to Car No. 801. With Couplers & Draft Gear	$1.00 pr.
(1H) Couplers, nylon horn type	0.20 pr.
(1i) Worm Gear, to mesh with geared Drivers	0.25 pr.
(1J) Car Wheels, 5.6 mm Diameter	0.20 pr.
(2A) Motor Truck Set, M.U. Type, less motor	set
(2B) Trailer Truck Set, M.U. Type	$2.35 pr.

The MODEL DOCKYARD Pty. Ltd.

216-218 SWANSTON STREET, MELBOURNE C.1. — 32 3505

THE AUSTRALASIAN MODEL RAILROAD MAGAZINE

Vol. 3, No. 30, JAN./FEB., 1968

AUSTRALIA'S LEADING MODEL RAILWAY MAGAZINE

THE OFFICIAL JOURNAL OF NMRA IN AUSTRALASIA
Incorporating THE YARDMASTER, The Bulletin of the Sydney Model Railway Society.

CONTENTS

	Page
ARMCHAIR REVIEW	6
HOW TO WIRE YOUR CONTROL PANEL	8
A WASH RACK, by Fred Gill	10
CANBERRA — a description of the Station Layout	12
VICTORIAN RAILWAYS Tt CLASS CARS, by Charles Huggard	16
HEAVY HARRY, by Paul Rogers	19
HOW I BUILT THE PCR, by Rodney Tonkin	20
NUMBER 49 SOUTH, by "Loco"	22

REGULAR FEATURES:

Scenic Route, p. 11; Mail Bag, p. 23; Shop Detective, p. 23; Club Car, p. 24; Yardmaster, p. 25; Market Place, p. 26; Our Plan, by Howard Armstrong, p. 27.

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EDITOR, J. T. St. LEGER MOSS. **OFFICE:** 189 Homer St., Earlwood, N.S.W. 2206. TELEPHONE: 55 6886.

ILLUSTRATORS: N. COUGHLAN, H. G. ARMSTRONG. **STAFF PHOTOGRAPHER:** IVAN W. IVE.

SUBSCRIPTION MANAGER: TERENCE N. CARPENTER.

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Editorial

Recent economic changes in England and America have caused Australian and New Zealand Parliamentarians, business executives, etc., to review their (and consequently ours) situation to ensure that although we may live 'down under', we do not 'go under'. We who live under the Southern Cross must realise that we cannot remain attached and dependant on mother or big brother indefinitely. If this situation is true in the business world, it is also true in other spheres of life, and the world of model railroading is one of them.

This fact is borne out by the continued support and appearance of this publication, and the ever increasing trend for modelling the local prototype. A book entitled 'Building and Operating Model Railways' has just been published in Australia. It was written by Australians for Australians and New Zealanders wha are interested in the subject. The number of manufacturers producing models of local prototype is increasing, as are the number of models being made.

Correspondence over the last few years between Australia and America indicate that the Americans think quite differently, and that matters which appear quite straightforward to us, can be, and indeed have been, misinterpreted. I am referring to the recent misunderstanding of SCMRA's policy by the NMRA of U.S.A. Many interested persons in Australia and New Zealand as well as overseas correspondents have contacted the Executive of SCMRA regarding these matters, but they now have the full picture in its correct perspective.

Space does not permit me to relate the full situation and text of the correspondence between the SCMRA and NMRA of U.S.A., but you can be assured that all that has taken place in Australia has been done with over 90% support by the NMRA membership in Australia and New Zealand. The only change that has taken place is the change of name from Southern Cross Region of National Model Railroad Association to Southern Cross Model Railway Association. This change was required by Australian law; remember Thomas Nationwide Transport?

Summing up, it appears obvious that all railway modellers in Australia and New Zealand must get together and make a stand in the world if we are to encourage manufactureres to continue their increasing supply of models of the local prototype.

On the Cover . . .

We like this photograph. We found it in our files. We don't know where or when it was taken. Can any reader help?

ARMCHAIR REVIEW

CALENDARS

N.S.W. Rail Transport Museum,
Box 1983, G.P.O. Sydney, N.S.W. 2001.

This is a finely finished calendar which we always are pleased to receive. There is a fine photograph for each month of the year depicting steam locomotives of the N.S.W.G.R. in action. 80 cents posted from the address above.

The Railway Enthusiasts' Society, (Inc.),
P.O. Box 2429, Auckland, New Zealand.

We always look forward to the receipt of a copy of this calendar each year. The cover has an excellent reproduction of an oil painting of a 482 X class by P.J. Baker. Heading each month's bunch of dates is a beautifully reproduced photograph of a steam locomotive in action. Nearly every variety is depicted in these pages. The back cover tells you where the shots were taken by indicating the places on a map of New Zealand. Send an Australian dollar for your copy.

PHOTOGRAPHIC BOOKLETS

STEAM PICTORIAL
N.S.W. Rail Transport Museum,
Box 1983, G.P.O., Sydney, N.S.W. 2001.

This book is a must for steam enthusiasts particularly those who follow N.S.W. prototype as steam will be rare on N.S.W. lines by 1970 except for shunting and stand-by work. Reproduced on excellent art paper it consists of 40 pages filled with locomotives of all types. At 70 cents this is a bargain.

THE CAMDEN TRAMWAY
N.S.W. Rail Transport Museum,
Box 1983, G.P.O., Sydney, N.S.W. 2001.

Reproduced in the same excellent manner as the above publication this is an illustrated history of the Campbelltown to Camden branch railway near Sydney, New South Wales. When it was closed on January 1, 1963, this eight mile branch line was a great loss to those interested in photographing quaint railways. This line has always been to local enthusiasts what the narrow gauge lines have been to the railway lovers in other States and New Zealand. Yours for 80 cents and well worth it.

KITS

SIGNAL ARMS
Ian Blunden,
P.O. Box 676, Rockhampton, Qld., 4700.

This manufacturer has sent us samples of upper and lower, home and distant signal arms in O and OO scale. These are pre-painted in correct railway colours ready for affixing to your signal posts. The O scale arms are 10 cents each and the OO scale are five cents each. Add 20 cents for postage. A sample will be sent for an S.A.E. This firm is planning the production of an illuminated theatre sign and also building kits, Australian style, in HO and N scales from Balsa wood. We will advise when these are to hand.

N.S.W. RAILWAYS B.D.L. BOGIE OPEN WAGON AND N.S.W. RU WHEAT WAGON.
Tonkin Products,
7 Park Ave., Oatley, N.S.W. 2223.

These are pre-painted cardboard kits with wire and balsa stiffening included as necessary. The average modeller could put together one of these kits during an evening, and with care would have a good model of the prototype. The BDL sells for 50 cents and the wheat wagon for 40 cents. The latter is designed to be built on a Lima 2009 wagon chassis. Your own bogies would be needed to complete the BDL.

M.R.C. & M.B.C.
M.R.C. Scale Models,
P.O. Box 283, Penrith, N.S.W. 2750.

These commonly seen freight cars on the N.S.W. railways are a must for the modeller of that State's railways. This kit, which can be converted to either type, has been carefully produced and the editor's son was able to put it together quite easily with 10 hours work, which isn't bad considering he is only 12 years old. This is a body kit only. Buffers, ladders, brake gear, couplers and bogies are not included and are left to the modeller. The correct bogie for this wagon is the 2AE known as the rivetted type. Modellers desiring the correct scale bogie can obtain them (see Market Place). This kit is to 3.5 m.m. scale.

This producer is planning other kits such as MLE, UME, FME, CME and should be on the market by the time this appears in print. Our sample kit came from Berg's Hobbies Pty. Ltd., 111 Macquarie Street, Parramatta, N.S.W. 2150.

BOOKS

ENGINE PASS, by D. B. Leitch, 184 pp. illus. (5½ x 8½).
Published by A. H. & A. W. Reed Pty. Ltd. $4.25.

The fascination of riding the footplate of a locomotive lives in all those who are thrilled by trains. However, very few of us can experience this pleasure. But David Leitch has managed, and with official permission, to travel and indeed drive, and fire most of the steam locomotives that grace, or have graced, the rails in New Zealand. In the pages of this book will be found fascinating accounts of travel by day and night along the main and branch lines of both islands of New Zealand.

This is one of those books that is hard to put down and your reviewer found himself reading till the early hours of the morning so fascinating are the tales that the author tells.

As the main branch lines are travelled a brief history is given of the district through which the train is passing. Many and fascinating are these stories.

Most of the photographs have been taken by the author and one or two have appeared in the pages of this magazine.

It is regretted that such a fine book must suffer criticism. The end papers are maps of the rail lines of New Zealand but are very badly designed and reproduced. Firstly, the printing is difficult to read needing a magnifying glass and secondly there is nothing more irritating than to have an author mention a railway station or geographical place and not be able to find it on the map.

It is hoped that when the next edition is published, and I am sure this will happen, for this will be a very popular book, one island only appears at each end of the book and local maps be inserted throughout the text showing the lines traversed with all necessary details.

Don't let the above deter you from buying this book, it's really good.

THE CROOKEDEST RAILROAD IN THE WORLD, by T. G. Wurm and A. C. Graves, 123 pp. 109 illus. (6 x 9") $4.20.

Don't laugh at the name of the first author. This railway has more wiggles than the proverbial worm. This is a beautifully produced book and tells the story of a narrow gauge steam railway which was built up a mountain near San Francisco. Rising to 2,600 feet with 281 curves this line is eight and a quarter miles long.

This book tells of its construction and its demise. It lasted for 30 years and its 109 illustrations, both photographs and plans, show its route, its locomotives, its cars and its bridges, as well as its buildings and roadworks.

Unlike many short, narrow gauge passenger carrying lines this one was profitable and became the mecca not only for railway enthusiasts, but all the important visitors to San Francisco.

Essentially this is a book for the armchair modeller but included in its pages are plans of its cars and one of its Shay locomotives which would be of great help to those readers who model narrow gauge railways.

Our copy from the Railroad Book Company of Australia.

CATALOGUES

Australian Modelcraft,
101 Laura St., Ekibin, Qld. 4121.

We have now received two copies of a publication from this company called N Gauge News. This is an extremely useful news sheet for those interested in N Gauge as enthusiasts in this scale can keep up with the latest productions from all over the world. Incidentally, this company keeps a very large range of equipment in this scale. Write for your copy, to address above; send 5c stamp.

Traction Publications,
P.O. Box 438, Canberra City A.C.T. 2601.

This company will send you by return mail a very interesting list of the publications which they have available. Not only are there books on model railways but included are publications on steam trams, buses and trolley buses, railways, electric railways and tramways. Some of the books on prototype railways deal with the trains of many countries including Canada, Denmark, Fiji, Ireland, New Zealand, and South Africa to mention only a few. We recommend you obtain a copy of their list.

"SEE SYDNEY IN '68"

The S.C.M.R.A. is holding a Model Railway Convention during Easter — 12th to 14th April, 1968, in Sydney. All who are interested in model railways are invited to attend.

For $10.00, plus $16.00 hotel accommodation per person for two (2) nights, if required, you will have a week-end of model railway interest. The programme features Club visits, Clinics, a special Rail Tour, a Convention Dinner and a series of competitions aimed to interest everyone.

The competitions will be open to all and will be held in the following categories:

1.	CONSTRUCTION:	A — Locomotives, Steam B — Locomotives, Diesel C — Rollingstock, Passenger D — Rollingstock, Freight E — Structures
2.	PHOTOGRAPHY OF MODEL RAILWAY ITEMS:	A — Black and White B — Colour Slides
3.	OPERATION:	Test your skill with our shunting problem
4.	ENGINEERING:	A test of loco drawbar pull and efficiency. Try your best performing loco against that of others.

A brief description of the planned programme is as follows:

Friday, 12th April—

Morning: Registration of guests and competition models at the Australia Hotel.

Afternoon: Tour of various large Club layouts.

Evening: Clinics and Competitions at Menzies Hotel.

Saturday, 13th April—

Morning: South Pacific Electric Railway for a Barbecue lunch and inspection of Tramway Museum.

Evening: Inspection of Competition models and Convention Dinner.

Sunday, 14th April—

Train tour with mid-morning departure and returning in time for all evening overnight trains.

For further information, please send a stamped addressed envelope to:

Mr. R. Tonkin,
7 Park Avenue,
OATLEY, N.S.W. 2223

HOW TO WIRE YOUR CONTROL PANEL

By a STAFF WRITER

The nerve centre of any Model Railway Layout is without doubt a correctly designed and wired control panel.

The control panel should be left until all the track work is completed, even if you find it necessary to make a substitute panel for use during the construction of the layout. This will ensure that your track blocks are of sufficient length (also not too long), and some pattern of operation has been developed. Figure 1 shows the layout plan which is to be used, and also indicates the blocks. On this layout we have a double track oval with passing sidings and crossovers, a single track oval also with passing sidings and storage tracks, and a crossover connecting the double track to the single track. Since we have three (3) distinct running tracks, it would be advisable to have three speed controllers. This arrangement also permits participation with other modellers.

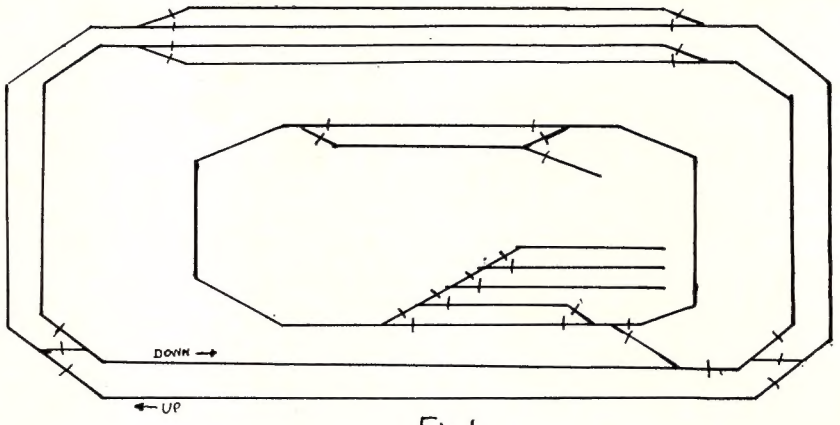


Fig. 1.

Our next problem is to identify the 'UP' and 'DOWN' lines. These terms originated in England when the timetable was listed on a board with the major rail terminal at the top, and the suburban and/or country stations listed below in sequence; hence a train departing from the main terminal ran 'DOWN' to the country, and the return journey, the trains moved 'UP' the board. As we have an oval track, we will presume that clockwise is UP, and anti-clockwise is DOWN. When locating the blocks, we must keep in mind that each block must be as long as the longest train, and also that we can move a train into a siding, switch out that block, and continue with other train operations on adjacent and adjoining blocks.

As there are a number of methods of wiring the track, the decision will have to be made quite early as to which method is to be used. The three main methods are: common return with a single polarity power pack, common return with double polarity power pack, and two wire with either single or double polarity power packs. (See Fig. 2).

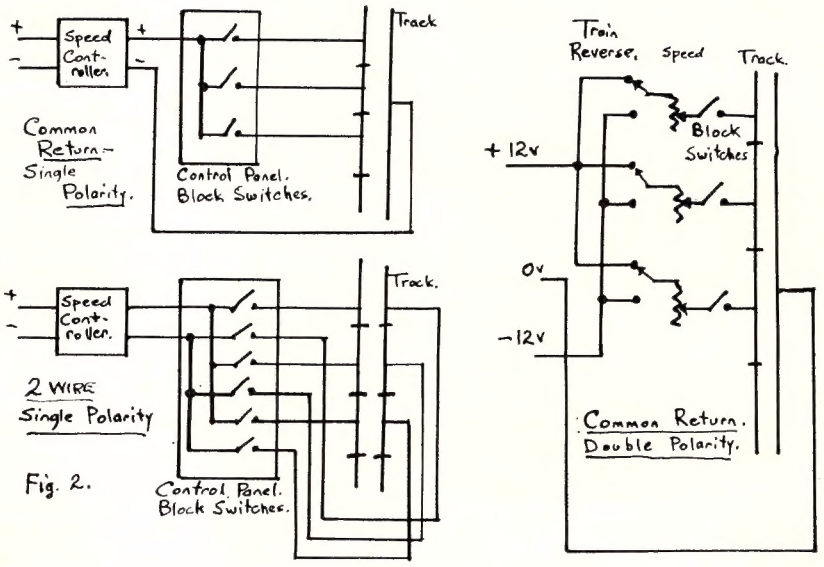


Fig. 2.

From figure 3 you will notice that provision has been made for a train reversing switch (this is usually associated with the speed controller — rheostat or transistorised) as well as a track directional switch. This will allow later signalling installation to be made simpler and also gives the prototype atmosphere of forward and reverse movement of the train in the UP or DOWN direction of travel, e.g., for normal working on the UP line, all track direction switches would be thrown to UP, and if the motive power had to reverse to back onto a train or for shunting purposes, then the train reversing switch would be used.

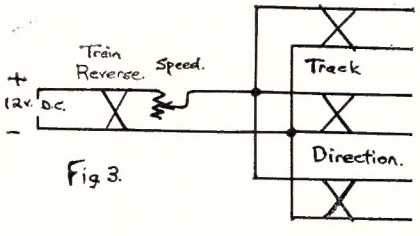


Fig 3.

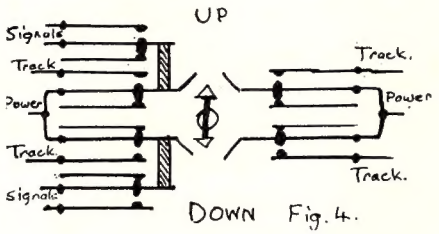


Fig. 4.

Figure 4 gives the wiring for the individual block switches. As signalling is to be installed on this layout at a later date, it would be advisable to fully wire the switches and connect the wires through to terminal strips provided under the control panel. The size of the switch shown would be for the branch line, where we have trains running in either direction over a single track. For the up and down main lines, only half (up or down) of the switch would be required. Lever key switches are available either both way or one way only, so this would be a consideration when purchasing same.

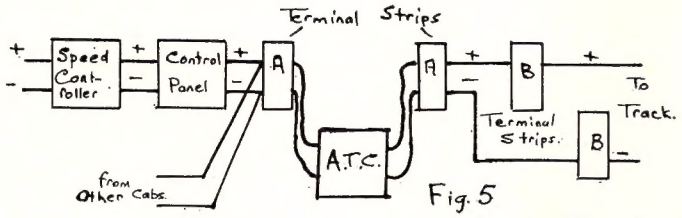
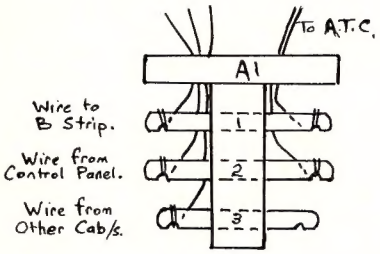


Fig. 5



NOTE If A.T.C. not required, strap 1 & 2. If other Cabs - Strap 2 - 3.

Fig. 6a.

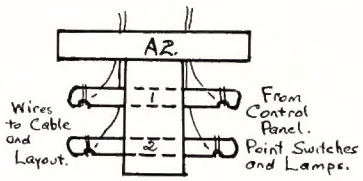


Fig. 6b.

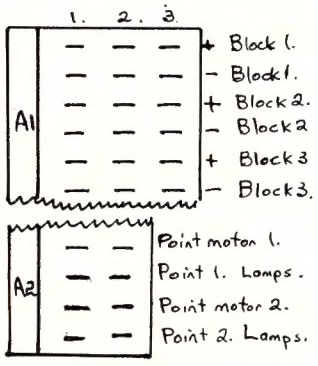


Fig. 6c.

To allow for flexible application of the control panel, a number of terminal strips are used. The most useful types fall into two (2) categories: pin strips— 2 x 20 or 3 x 20; and flat screw-type with up to 20 individual terminals on each strip. Figure 5 is a basic diagram showing the wiring order of the different terminal strips, allowing for automatic control if required at a later date, and also location for connection of other cabs if required. Figure 6 shows the actual connections to the terminal strips. Note that pin strips are used for the 'A' strip, and screw terminals are used for the 'B' strip. As well as making it relatively easy to adapt the control panel to suit the method of wiring, the screw terminals on the 'B' strip make fault finding (we hope it is never necessary) easier and quicker.

In addition to the track direction switches, the switches for operation of point motors are also mounted and wired on the control panel. Where 2 sets of points are to be operated simultaneously, e.g., up main to down main, branch to down main, only one switch need be used — this eliminates the possibility of derailment and/or collision due to only one set of points being operated. The point direction lamps are operated through the mechanically operated springset fitted to the point motors.

Now to the actual construction of the control panel. The easiest and simplest operation can be achieved if the actual track layout is shown on the panel. To make the block divisions easier to define, the top of the panel is painted in a very light colour, with a darker contrasting colour used to show the track, with gaps left in the line to indicate the gaps in the track. Track direction switches are mounted parallel to the lines, and such that they are pointing in the direction of travel. When fitted, track occupancy lamps would be placed in line with the direction switch.

Switches for point motors are mounted at right angles to the line over the points, and the point direction lamps are also at right angles to the track (Figure 7).

The timber for the top of the control panel must be thick enough to support all the switches; in this case 40 of them, with possibly 50 or more lamps. The writer used ¾" ply, 14" x 28". This gives sufficient clearance between switches to operate individual switches without accidentally knocking adjacent switches. The speed controllers and train reversing switches are mounted separately alongside the control panel. As there is quite a maze of wires, it was necessary to follow some form of colour code. Fortunately there are quite a few different colours and even shades of colours available, and a record is kept of what colour goes where. All the wiring from the switches and lamps is tied into a 'form', with a 'goose neck' provided to permit lifting the top of the panel, and connected to the 'A' terminal strip. Fixed wiring is

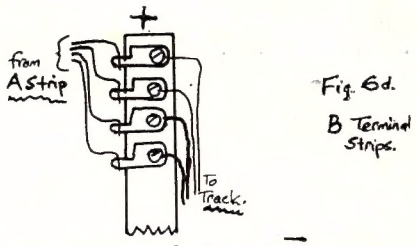
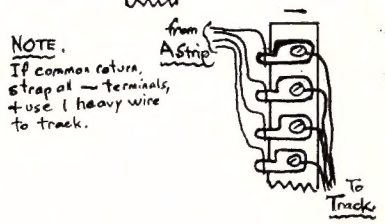


Fig. 6d.
B Terminal Strips.



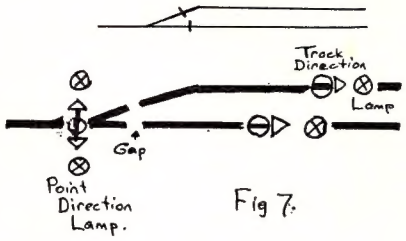


Fig 7.

used between the 'A' and 'B' strips, and the control panel is connected to the layout via a length of cable and 2 multiple contact plug units.

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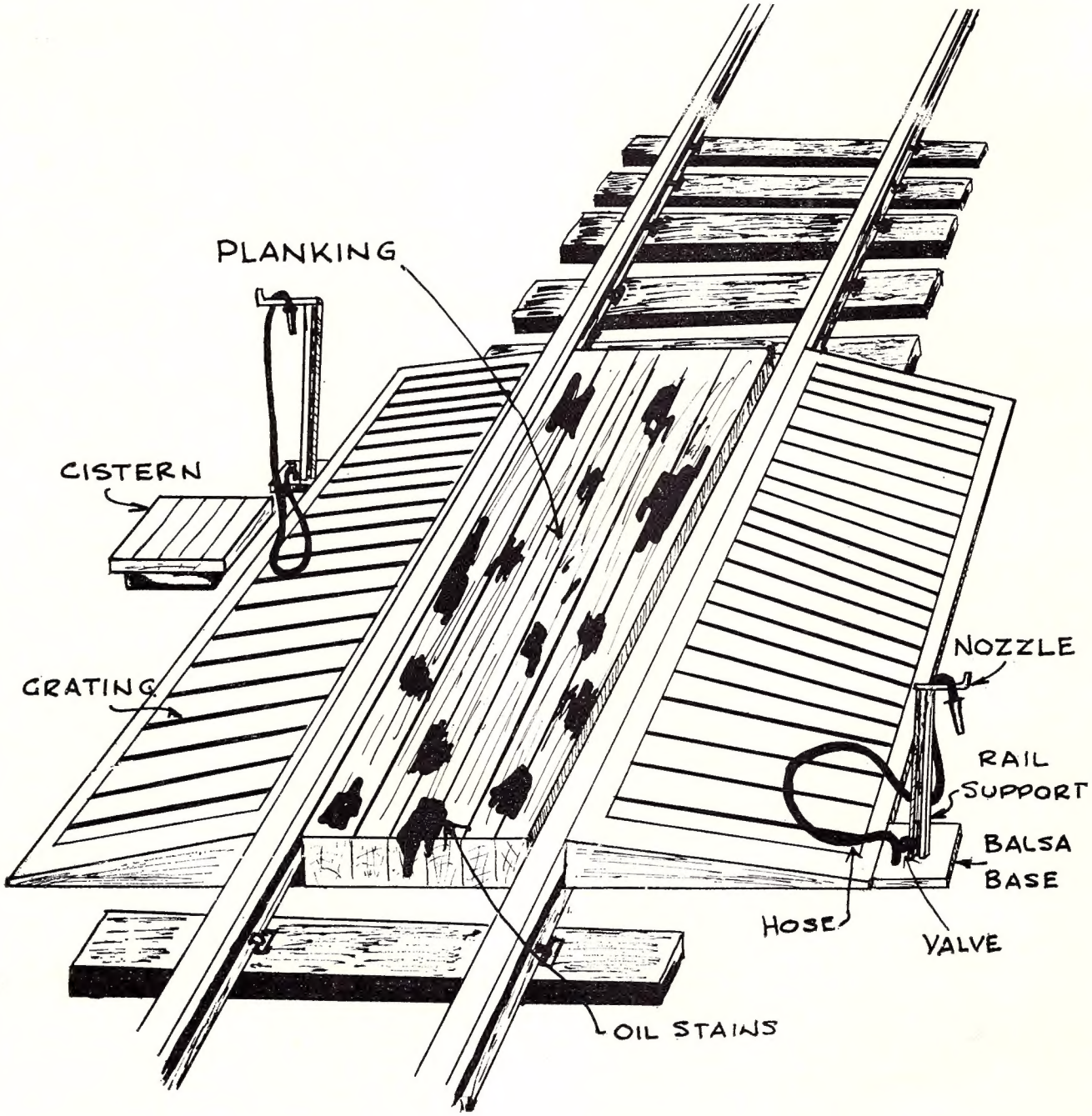
A WASH RACK

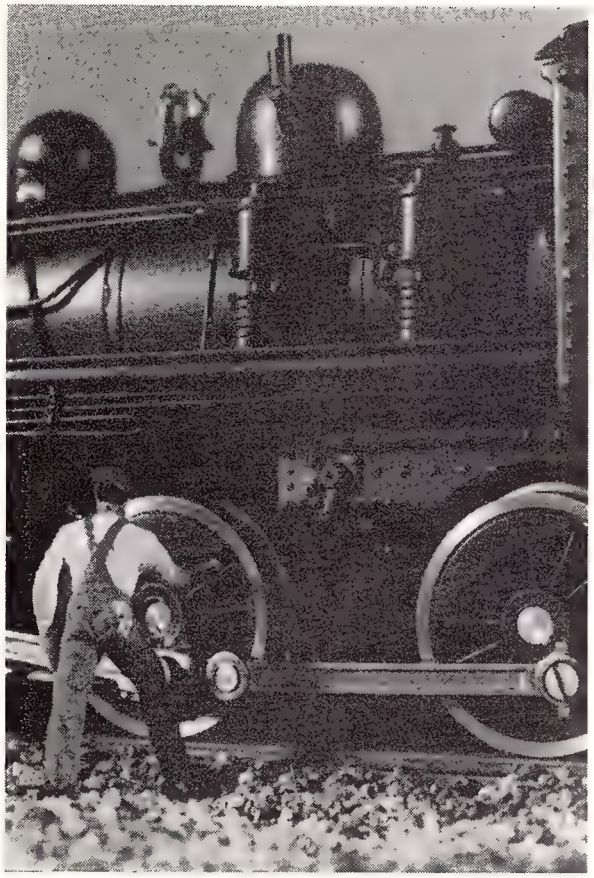
By FRED GILL

Wash racks are varied in appearance. The accompanying sketch shows an easily modelled type that would suit any layout.

If using pre-fab track then you need only add a thin layer of balsa or cardboard or Modelcraft scribed sheet, to the centre of the track to represent the planking. Make sure that it clears the flangeways of the wheels. The outside sections of track can be covered by cardboard, scribed deeply to represent grating. The whole of the sections should be painted a light grey in colour to represent concrete. The centre section can be "spotted" with drops of oil, etc., to make it look as though your locomotives are well maintenanced. The cistern is a small square of scribed balsa glued onto a smaller square of wood or thick cardboard.

Hoses are lengths of thin wire, painted a dull black colour, then hung in a limp fashion from the supports. The supports can be made from lengths of old rail with a crossarm soldered to them. The hose nozzles are short pieces of heavy wire, joined to the end of the hose and shaped with a file. The other ends of the hoses are pushed into a length of balsa which is glued underneath the supports. Blobs of solder on the wires will do for valves. You can now "clean those locos".



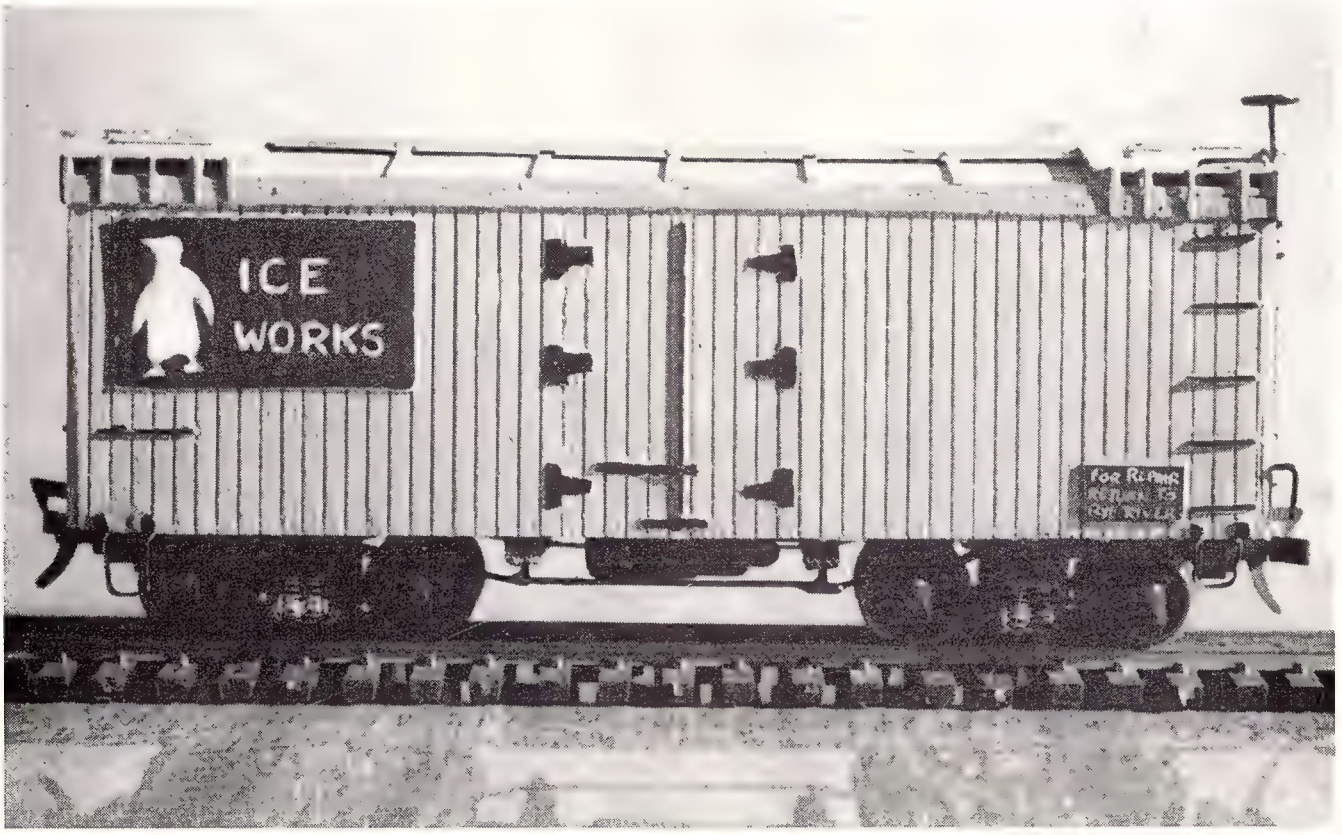


Above: Paul Van Leuven, famous for his N Gauge Models, sends this picture of the NSWGR MHG Brake Van and HLV Louvre Van which he built and are now being produced in all brass construction in Japan for eventual sale on the Australian market. A C38 is in tooling and should be a masterpiece.

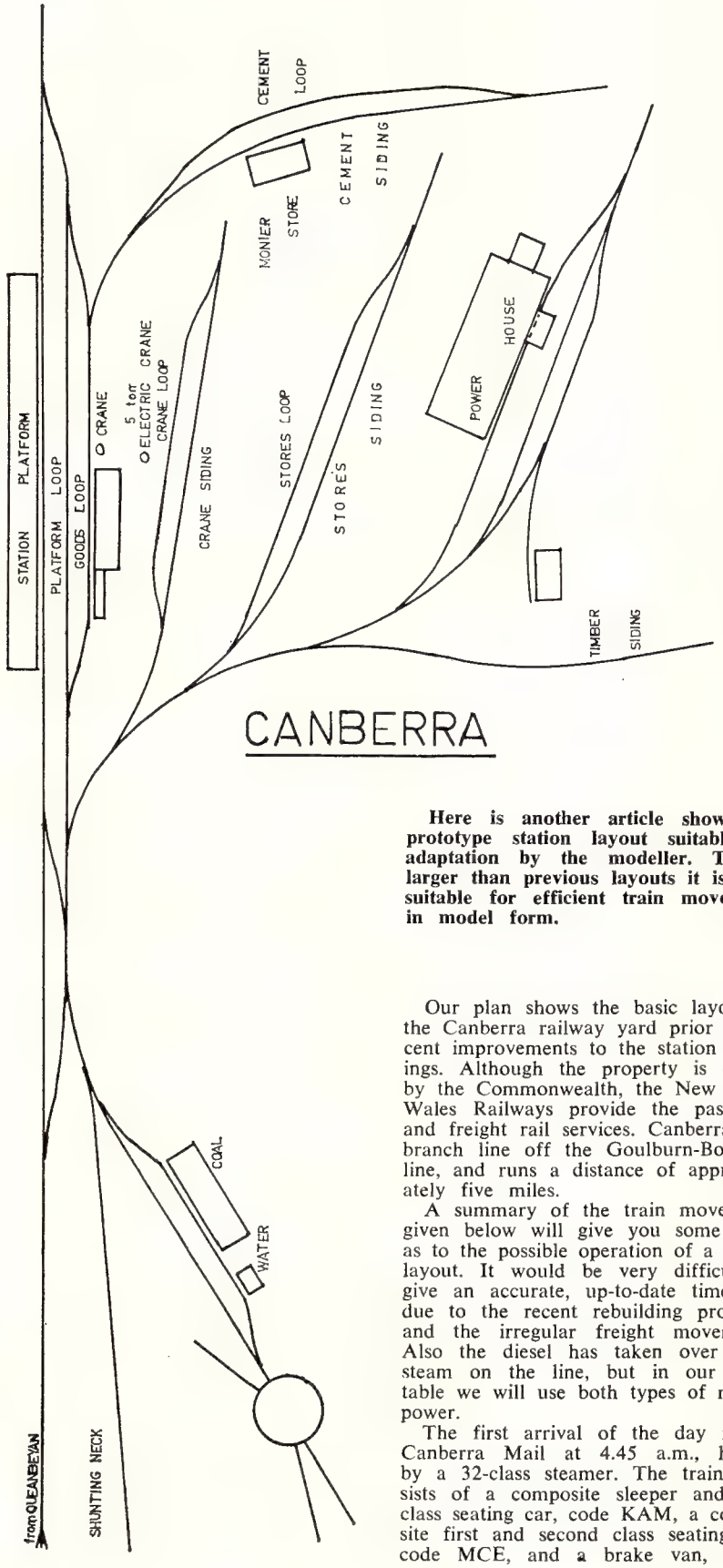
THE SCENIC ROUTE

Left: Lyndon Spence of the Wollongong Model Railway Society has this San Pedro 2-6-0 Canadian Pacific locomotive on his layout. The fireman proceeds with his oiling job prior to taking his train out on the road.

Below: Scratchbuilt in wood and styrene by Laurie Jackson this D. & R.G.W. reefer of the 1900 era is in HO scale and HOn3 gauge. The couplers are H.P. in T.T. scale.



CANBERRA



Here is another article showing a prototype station layout suitable for adaptation by the modeller. Though larger than previous layouts it is quite suitable for efficient train movements in model form.

Our plan shows the basic layout of the Canberra railway yard prior to recent improvements to the station buildings. Although the property is owned by the Commonwealth, the New South Wales Railways provide the passenger and freight rail services. Canberra is a branch line off the Goulburn-Bombala line, and runs a distance of approximately five miles.

A summary of the train movements given below will give you some ideas as to the possible operation of a model layout. It would be very difficult to give an accurate, up-to-date timetable, due to the recent rebuilding program, and the irregular freight movements. Also the diesel has taken over from steam on the line, but in our timetable we will use both types of motive power.

The first arrival of the day is the Canberra Mail at 4.45 a.m., hauled by a 32-class steamer. The train consists of a composite sleeper and first class seating car, code KAM, a composite first and second class seating car, code MCE, and a brake van, coded MHO. This train was detached at Goulburn from the Cooma Mail. When empty, would be stabled in the platform loop during the day. The platform is now clear to receive a diesel-hauled passenger from Goulburn — arriving in sufficient time for office workers who could have entrained at any of the stations between Goulburn and Canberra. The consist of the train varies from day to day, depending on availability of coaching stock in Goulburn yard. There is an additional car on this train that adds some distinction — a sleeper off the Sydney bound Spirit of Progress left behind at Goulburn.

Twenty minutes later a standard goods loco arrives with a number of bogie vehicles which were detached from an express freight, ex. Darling Harbour and Enfield, at Goulburn. This new arrival could be stored in the shunting neck until the yard is cleared by the departure, at 9.00 a.m., of the 48-class diesel off the commuter now running a pick-up goods train back to Goulburn. Meanwhile, the 32-class steamer has been prepared in Loco for a return journey to Goulburn, and backs into the platform. The sleeper off the Spirit is detached from the assorted cars there and is shunted onto the loop line and attached to the MHO, MCE and KAM in preparation for the night trip to Goulburn. This done, the steamer returns to the platform, and at 10.00 a.m. departs with a passenger train on a leisurely trip to Goulburn, connecting there with a diesel train for Sydney.

Movement in the yard is now taken over by the standard goods loco, which breaks up the bogie vehicles from Darling Harbour, etc., and then continues general shunting duties throughout the day.

The arrival of the Canberra portion of the Canberra-Monaro Express (a train made up of 2x4 car air-conditioned diesel trains from Sydney) is indicated by the arrival of taxi cabs, etc., outside the station entrance. This train comes in just on 12.30 p.m. and is followed by an extra train approximately ten minutes later during the height of tourist season, or on any other special occasion attracting people to the National capital. The diesel train could remain in the station whilst being cleaned through, but there is still activity in the sidings.

The various sidings provide accommodation for coal hoppers at the power house, bulk cement hoppers at the Monier concrete pipe siding, general goods would be handled in either the crane or goods sidings, whilst the larger goods would be handled in the stores siding with the aid of a mobile crane. Open wagons occupy the timber siding, and another mobile crane would

be working here. As the afternoon draws towards sunset, the standard goods loco is preparing a train in readiness for an outwards goods to Queanbeyan, but must wait until the Sydney bound Canberra-Monaro Express departs at 5.02 p.m. to connect with the other half of the train from Cooma at Queanbeyan. The goods departs on its short journey to Queanbeyan, where some of the vehicles will join a night goods from Cooma. If the relief passenger was tabled, it would depart 30 minutes after the regular express.

All that remains in the yard now is a small collection of goods vehicles scattered through the various sidings, and the passenger cars for the night mail to Sydney including the sleeper for the Melbourne bound Spirit of Progress. The problem of motive power for this train is solved by the arrival of a 48-class diesel hauling a pick-up goods train at 7.40 p.m. These vehicles are stored wherever convenient until next day, and the diesel then collects the passenger cars out of the platform loop, and backs them into the station platform in readiness for a departure at 8.40 p.m., after which all activity ceases until 4.45 a.m. next day. As it is not possible to operate a model railway layout strictly to the prototype timetable, it is hoped that this general outline will give you some ideas of railway operation.

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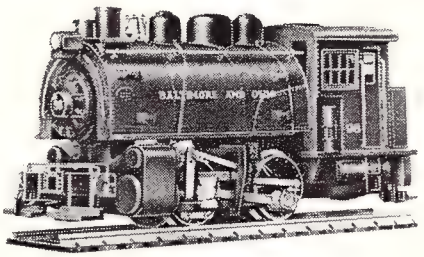

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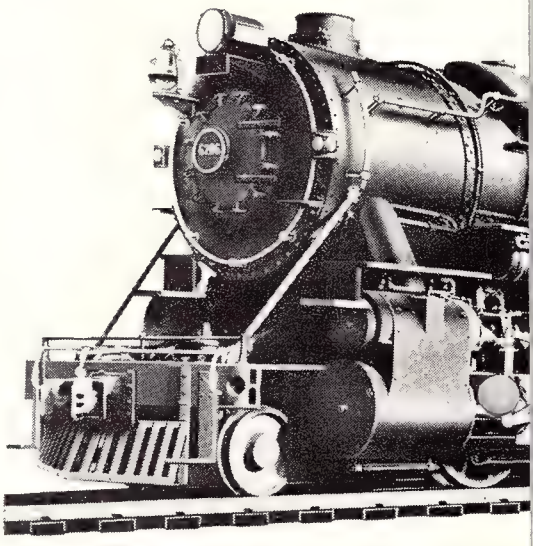

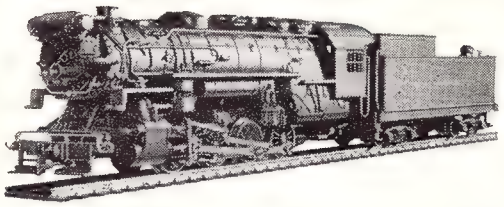

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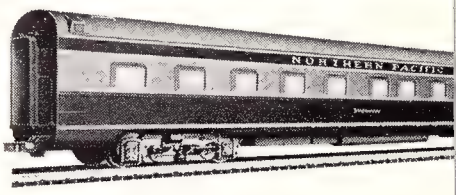

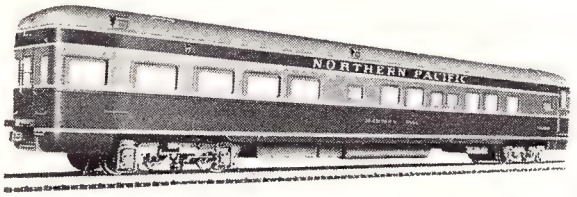

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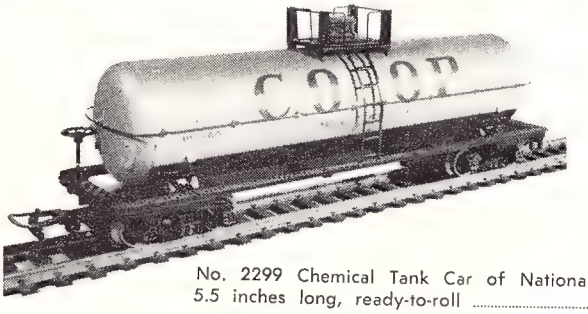

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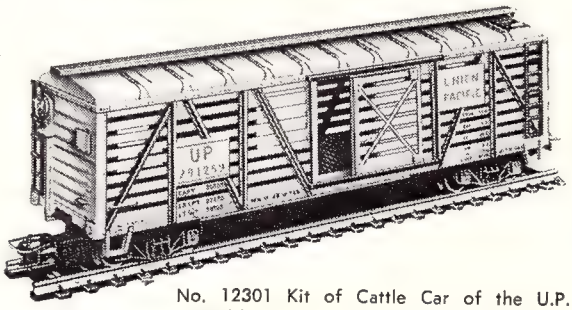

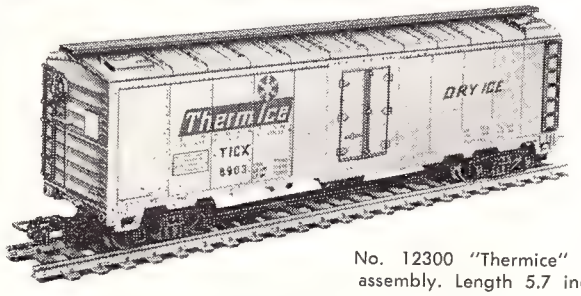

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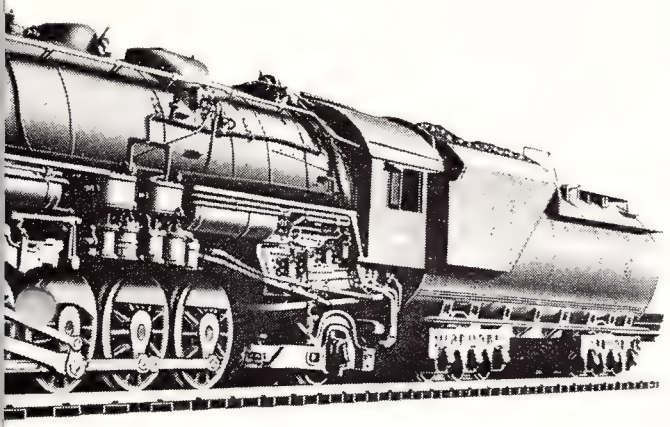

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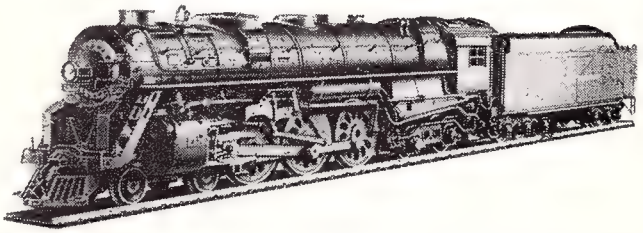

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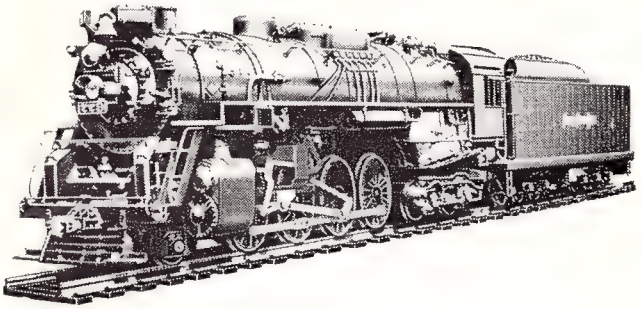
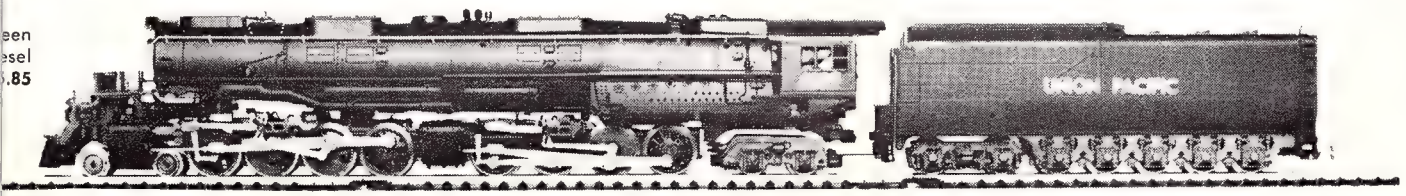


No. 1244 Nickel Plate Road "Berkshire" 2-8-4, 12-wheel tender, 14 in. long **$43.95**



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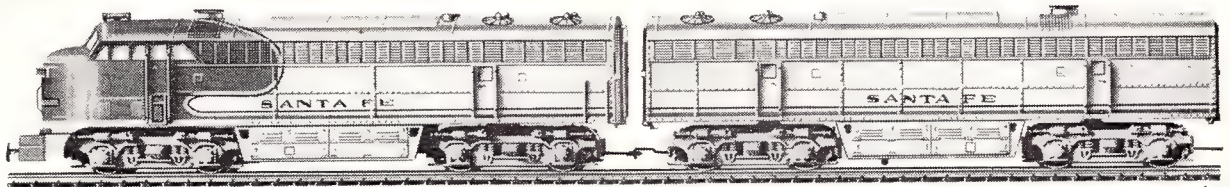

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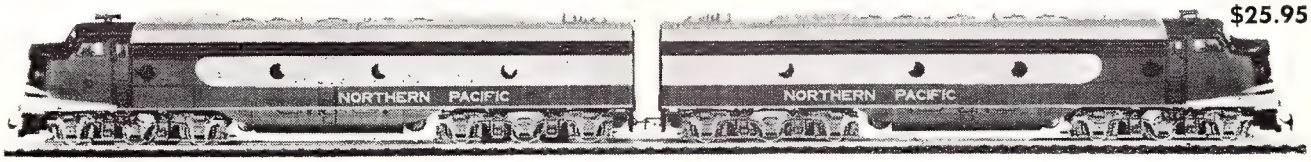

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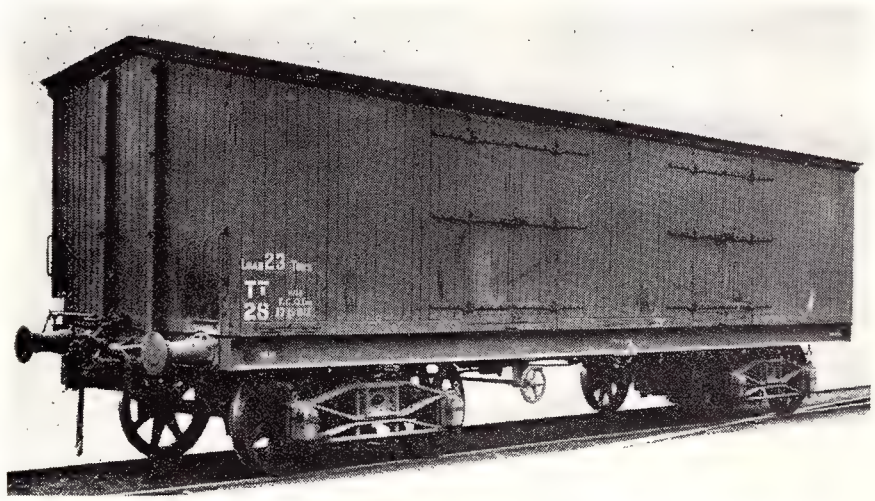
VICTORIAN RAILWAYS 'Tt' CLASS CARS

By CHARLES HUGGARD



Victorian Railways official photo.

Thirty-one of these triple sheathed, double air space insulated cars were built at Newport Workshops during 1889-91. Of basically the same design, they differed only in detail, payload rating, and specific use. 'Tt1 was specially fitted for the carriage of milk cans, and entered service on the Traralgon-Melbourne run. There were three single doors on each side, two internal bulkheads, and folding shelves to carry a double layer of cans to total 262. All other cars had two double doors each side. Nos. 5, 11, 12, 20, 26 and 31, were fitted out as casuality vans for inclusion in work trains. Several cars had ice bunkers built into each end, and rails and hooks added specially for the meat carcass trade. Ventilation of the air spaces was through elongated oval holes cut into the corner posts. Roofs appear to have been additionally covered with sheet metal at time of building.

Underframes were of wood, with steel channel side sills, and truss rods with variable length queen posts. Tt1 had a two-piece 'K' brake fitted, whilst all other cars were equipped with the combination 'K' brake. Screw couplings and draw hook, buffers and safety chains to bogies, were normal equipment. Shunters grabs were first fitted in 1930.

Copies of the original blueprints indicate that the bogies as supplied had wooden bolsters. These were at some later date replaced by steel bolsters. Existing photos also show additional bracing to bogies.

Although most of these cars have been scrapped at the time of writing, several were still in revenue service as late as 1963, as rebuilt into BP and BB classifications. Very recently, one was burnt at Newport. As WW cars, one is at Loco supply at Maryborough, two in work trains at Dynon, and others at Benalla and Arrarat.

My models attempt to recapture in miniature, Tt1 as it might have appeared in 1889, Tt17 at some later date with derated payload, and Tt28 with rebuilt steel underframe and load limit 23 tons.

Photos of these three cars, as well as Tt9, a banana special, may be had from the Public Relations Office, VR Buildings, Spencer Street, Melbourne.

MODEL CONSTRUCTION

Construction of the model follows the familiar 'box' method. Cut a floor piece 35ft. long by 8ft. 6in. wide, less 2 thicknesses of the sheathing you will be using. I used 3/16in. 3-ply. Cut a ceiling to the same dimension (1/8in. balsa), and two end blocks (¼in. balsa) the same width, and high enough to bring the top of ceiling to 6ft. 9in. from the bottom of the floor. Assemble this open sided box, using glue of your choice. Ensure that it is really square, and allow to dry thoroughly.

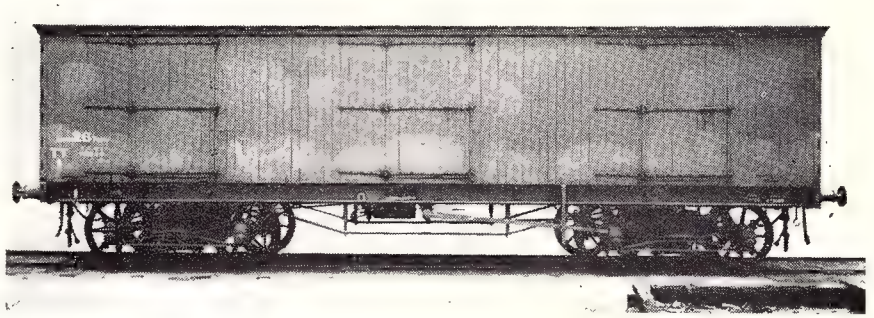
If you are adding weight, now is the time to do it. Pliobond is a good adhesive here. Again allow to dry properly. Now fill in sides of box with 1/8in. balsa, ensuring that it is flush with the edges of floor and ceiling.

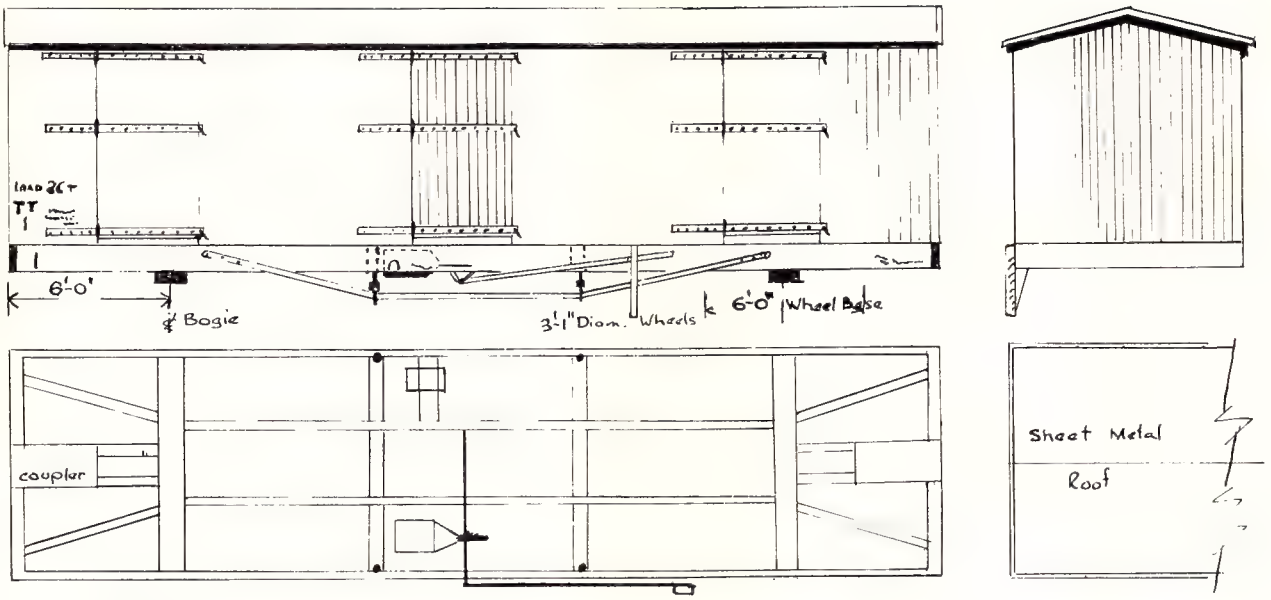
Referring to the drawings, carefully mark the position of the doors onto the sub-sides, and fit 3in. kickboards level with bottom of floor under each door. Now cover balance of sides with 6in. scribed siding. Accentuate doors by marking around with hard pencil.

Glue a 1/8in. square stringer to centreline of ceiling, and fit several triangular roof supports, trimming to zero at sides. Pitch roof of 1/32in. balsa or other suitable material, chamfering at centre for neat fit. Allow 1/8in. overhang all round. Cut and fit ends of 6in. scribed stock. Fit 1/16in. by 1/32in. moulding under eaves, first the sides, then the ends. When thoroughly dry, sand and file the roof edges to overhang the moulding a scant 1/32in..

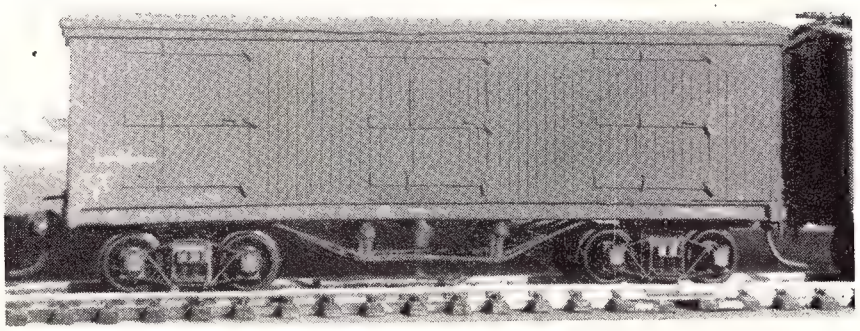
Turn car over and fit side sills of 10in. channel. I used 1/8in. NE channel, but you could use 3/32in. sq. strip placed 1/32in. back from edge of floor, and flange with 1/8in. by 1/32in. strip. Or use card or .020 styrene for the flange. Keep the channel 1/16in. short of each end to allow for the 1/8in. by 1/16in. buffer beam. Fit bolsters, either built up or commercial type. If using balsa, pliobond a thin washer over king-pin hole. Attach trucks and test for coupler height. Remove trucks, attach couplers of your choice, then fit buffer beam, notching or dividing as required, to fit around couplings. Glue on 1/32in. end braces (except Tt1). Add whatever underframe detail suits your fancy, and fit the two truss rods. Make the queen posts from small finishing nails. Cut off the heads and notch. Solder

Victorian Railways official photo.





V.R. 35' Bogie Refrigerating Truck circa 1889. Code Tt.



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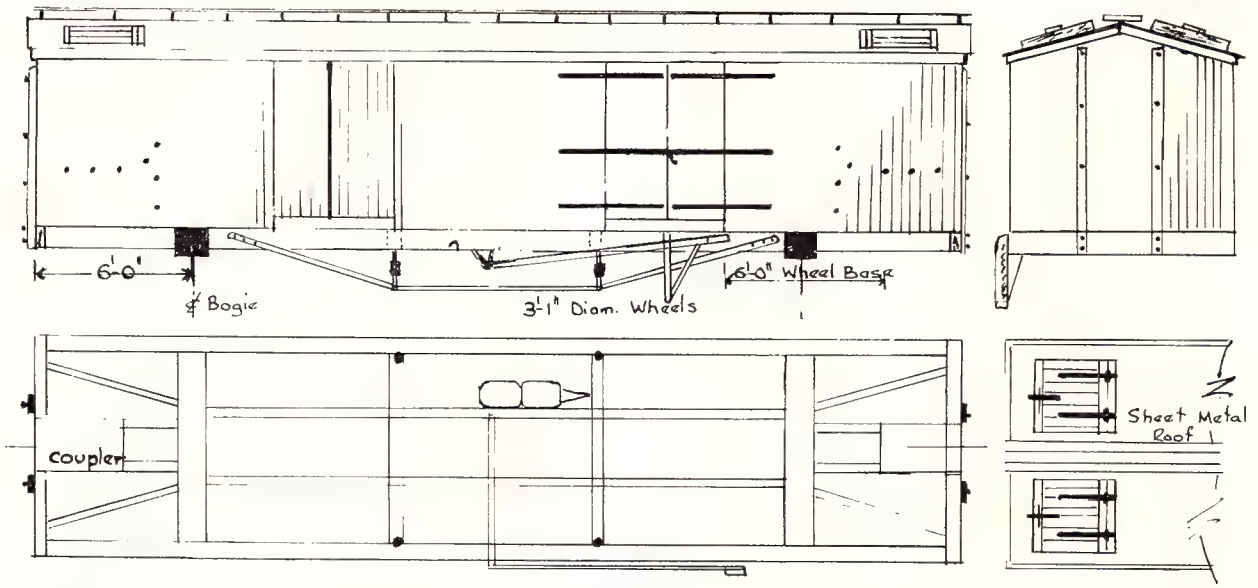
or glue fine wire into notches, bend ends down to floor and pliobond to rear of channel. If your model is a 'rebuild' omit the truss rods.

The strap hinges are thin card glued into place. The hinge knuckles, door pulls, and door catches, are fine wire bent to shape and pressed into holes drilled in appropriate places.

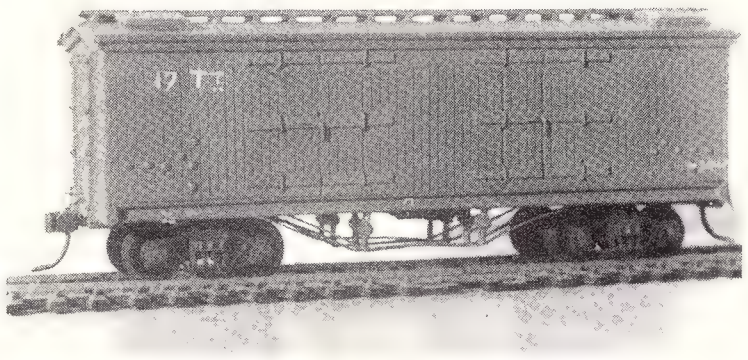
Make a template from card and 1/8in. sq. stock for the positioning of the bolts holding the ice bunkers. Mark onto the car, using your scriber, and press the lill pin bolts into place. Nut-bolt-washers on end braces are by Kemptron.

If modelling the ice reefer, cut Austral or NE roof walk (or use three separate planks) to length of car roof and mark position of the 17 supports. Glue short lengths of 1/32in. sq. in place and when dry trim to width of roof walk. Slightly hollow the supports, file off a little of the roof peak, and glue walk into place. Build up your hatch covers from scribed stock and stripwood. Refer to drawings for dimensions. Laminate onto 1/32in. plain stock, square up edges and glue into place. Hinges and catch are thin card, hinge knuckles and hatch grab are fine wire.

The lever-type hand brakes I used are commercially made; you could make yours from brass strip, or cut them from a discarded Airfix model. (Handbrake is on one side only). You'll have to work out the fixing of it too. Rebuilds were fitted with wheel and ratchet brakes. I made two brackets from tinplate, drilled a hole in one angle and pliobonded the other end to floor of car. Solder a brake wheel to the end of a length of wire, slip on a plastic tubing spacer, thread wire through bracket holes, add another spacer, then solder other brake wheel



V.R. Standard 35' Refrigerating Meat Car. Code Tt, 1889-1891.



in place. Cut off surplus wire and file smooth. You could use press studs as brake wheels as suggested in 'Smoke Box', A.M.R.M. Jan./Feb., 1966. Additional details such as grab irons, uncoupling levers, vents as fitted to Tt9, etc., are best left to the individual modeller's taste.

Now for the paint shop. You could choose the smart new ferric red of the car just entering service, or the stained and faded appearance of one with many work miles behind it. Again this is a matter of your own taste or ability.

Letter appropriately, refit the trucks, and enter the number on the cars available list.

(Model photos by the author).

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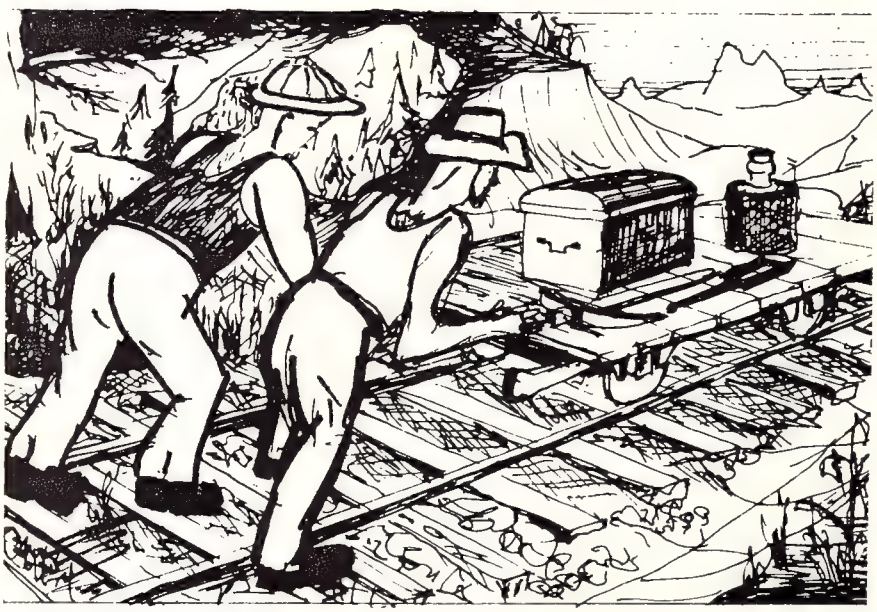
Blowed if I can see why anyone'd want to model railroads. Just plain work!



HEAVY HARRY

By PAUL ROGERS

The second largest, heaviest and strongest steam locomotive in Australia — this is what the Victorian Railways possess. Exceeded only by the NSWGR Beyer-Garratts in size, power and performance the VR's 'H' class was the sole 'Northern' on the system.

Constructed by Newport Workshops in 1941 it was originally intended to replace older type locomotives on the crack 'Overland' express, which had previously required double-heading. A total of four of the class were planned; however, only one was ever assembled; thus 'Heavy Harry' was born!

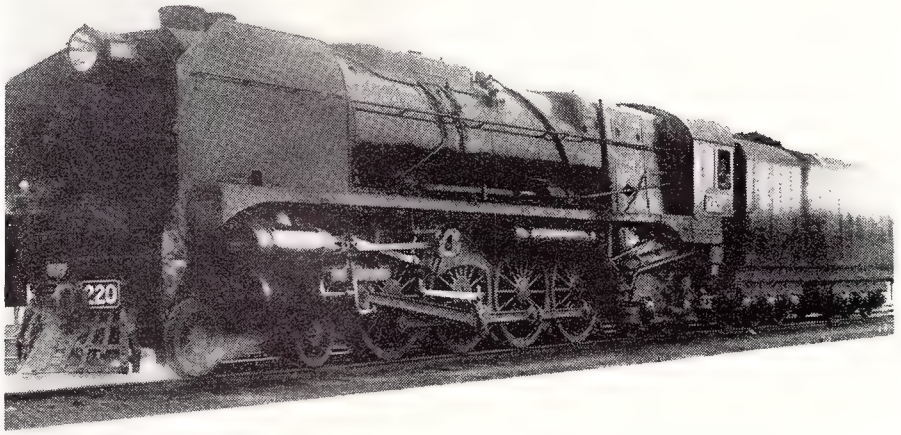
The massive locomotive was nicknamed after the VR's Chief Commissioner, Sir Harold Clapp, who foresaw a vast improvement in the running of the 'Overland', between Melbourne and Adelaide by the introduction of the 4-8-4 unit. However, overbridges along the route needed strengthening, as did some of the track bed. Wartime conditions prevented any reconstruction work on the line, and H.220 worked out almost its entire life on the North-Eastern line to Albury, wheeling 1,000 ton freights along this route.

Justifiably proud of their loco, the VR placed it on exhibition at Spencer Street station besides T94, an elderly 0-6-0 tender unit, to demonstrate the improvements in locomotive design in the previous sixty years. It is estimated that over ten thousand people inspected the locomotive in the two days (15th and 16th February, 1941) it was on exhibition prior to entering revenue service.

Heavy Harry possessed some unique features, one of which was the double smokestack chimney. It also possessed a mechanical stoker, the three cylinders (the centre one drove the leading coupled wheels, whilst the other two were connected to the second axle), the use of American-styled bar frames, and a 220 lbs. boiler pressure, the highest for any Victorian locomotive!

Twin 1,600 h.p. 'B' class diesels supplanted steam power on the 'Overland' in October, 1952, so Heavy Harry never ran the famous express. With increasing use of 'B' and 1,800 h.p. 'S' classes of diesels on the North-East route, the inevitable end came for H.220 on April 30th, 1958, after a working life of 17 years and 821,860 miles.

However, the Australian Railway Historical Society (Victorian Division) decided that such a locomotive should if possible, be preserved. Negotiations with the Victorian Railways resulted in H.220 being placed in the Rail Museum at Newport on April 10th, 1962, at its birthplace! Even though preserved in static condition, the empty shell still echoes the challenge of a 260 ton steam locomotive utilising 55,000 lb. tractive effort to lift 1,000 ton freight trains in all its gracefulness in the way unique to a steam locomotive.



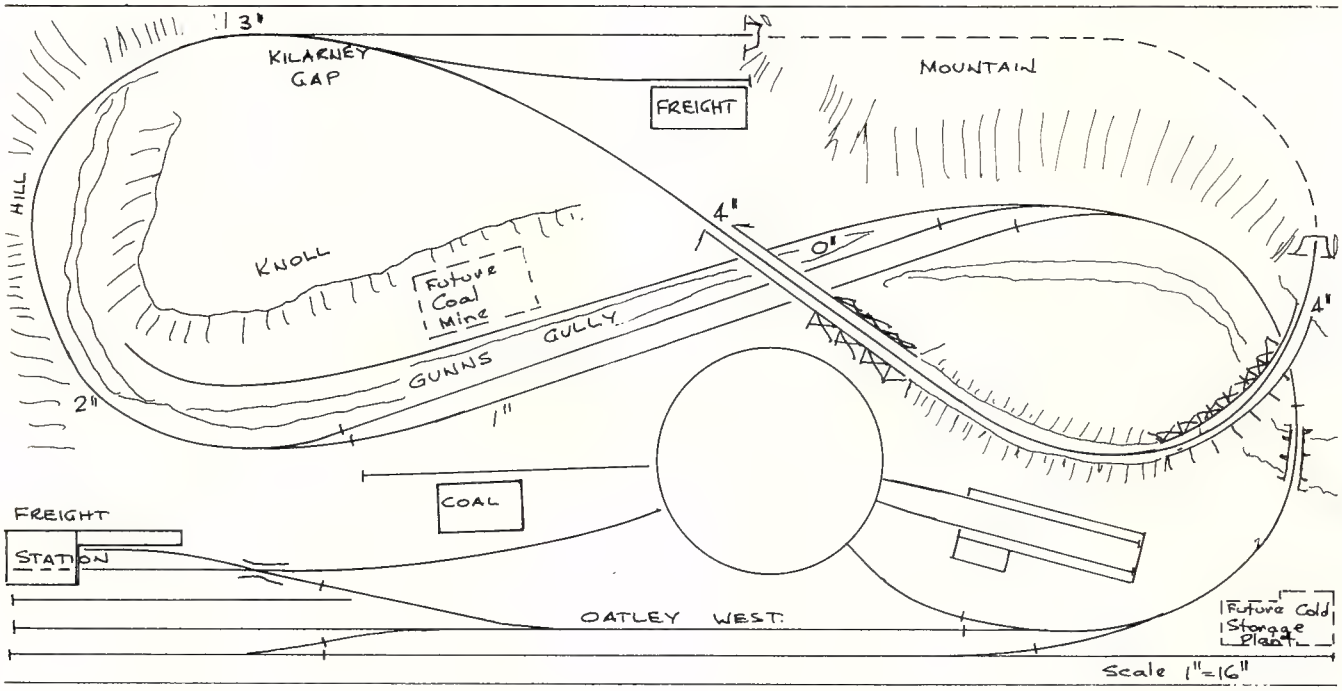
Victorian Railways official photo.

Technical Details:

Wheel arrangements:	4-8-4 with twelve-wheeled tender.	
Cylinders:	Three — one inside, two outside.	
Stroke:	21½in. x 28in. (all cylinders).	
Driving wheels:	5 feet 7 inches diameter.	
Front bogie wheels:	2 feet 9 inches diameter.	
Rear bogie wheels:	3 feet 1 inch diameter.	
Tender wheels:	3 feet 0¼ inches diameter.	
Total wheelbase (loco):	42 feet.	
Total w'base (loco & tender):	82 feet 1 inch.	
Boiler pressure:	220 lbs. per sq. inch.	
Tractive effort:	55,000 lbs. (at 85 per cent. boiler pressure).	
Weight:	Australian	US Tons
Engine & Tender in Steam—	260 tons 1 cwt.	291 tons 4 cwt.
Engine in steam:	146 tons 10 cwt.	164 tons 0 cwt.
Tender in steam:	113 tons 11 cwt.	127 tons 4 cwt.
Engine & Tender Empty—	173 tons 5 cwt.	194 tons 1 cwt.
Engine empty:	131 tons 0 cwt.	146 tons 14 cwt.
Tender empty:	42 tons 5 cwt.	47 tons 6 cwt.
Water capacity:	14,000 imp. gallons.	
Coal capacity:	9 tons.	
Boiler Heating Surfaces—		
Firebox, etc.:	274 sq. feet.	
Syphons:	80 sq. feet.	
Tubes and Flues:	3613 sq. feet.	
Arch Tubes	13 sq. feet.	
Superheater:	780 sq. feet.	
Total:	4760 sq. feet.	
Grate area:	68 sq. feet with mechanical stoker fitted.	
Valve gear:	Walschaerts.	
Piston valves:	11 inches.	
Travel:	6½ inches.	
Lap:	1½ inches.	
Lead:	¼ inch.	
Builders:	Newport Loco Workshops, Victorian Railways.	
No. in traffic:	One. No. H.220.	
Maximum speed:	60 miles per hour.	

HOW I BUILT THE PCL

By RODNEY TONKIN



This is my second HO layout; the less said about the other, the better. I began planning it about a year ago and after filling the rubbish bin with discarded plans, the one shown in the plan below emerged. It has some rather unusual features, its 15in. radius curves, 1/24 grades, No. 4 points on the main line and the track plan itself a point to loop.

From the above you are probably thinking that it is an 1890 vintage pike but it isn't. When I commenced construction I was thinking of modelling the Norfolk & Western, but I gradually came around to NSWR so the American equipment is now being phased out of service. This is being done, if possible, by converting to local prototype to supplement the scratchbuilding equipment, or if this is not possible, relettering it for the Pacific Coast Lines, a small railway operating on the NSW south coast. This company very conveniently uses AAR freight cars and a Norfolk & Western Y6b 2-8-8-2, obtained after N & W dieselised. The prototype for this use of old US steampower is National de Mexico, who used many surplus locos until they dieselised.

The layout is of the open-grid type on an L girder frame of the type described in Model Railroader magazine in one of their project layouts. As my layout is only 4ft. by 8ft., I used 2in. by 1in. dressed oregon pine. The track base is ½in. pyneboard, attached to the L girders and cross members by 2in. by 1in. uprights at the right level. The track in most areas, except the mine spur and return loop, is laid on 1/8in. cork as a ballast. The track on the mine spur is Tenshodo, and the return loop is a mixture of Peco, Shinohara, Lima and Fleischmann; and some is hand laid on individual wooden or fibre sleepers. On the whole it operates with reasonable reliability and most of it looks reasonably realistic.

The layout is wired for basic cab control with nine blocks and two throttle; later a third will be added for Oatley West yard only. The points

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in the yard at Oatley West are all hand operated and all main line points are electrically operated. This is reasonably economical as there are only five mainline points. The powered points and the power routing is done from a CTC style map-type control panel and if extra manpower is available someone gets the job of dispatcher. If not the individual train crews do it.

Scenery on the PCL is of the so-called hard-shell method where a web of masking tape is assembled and crumpled wet newspaper is placed on it to build up the shape; then small pieces of newspaper dipped in a thin plaster of paris mix are laid onto the paper mockup. It is best to put on two layers of plaster covered paper if ordinary plaster of paris is used.

When it has set a thin plaster mix precoloured with dry colour is brushed on; when it has gone stiff it is brushed with a clean damp brush to make the rock strata. When this is dry, it can be coloured by painting additional colours on with poster paints or oil paints.

To make earth and grass I mix into the dry plaster enough dry colour to get realistic grass and earth. I then dampen the plaster scenery using an old fly spray filled with water to which is added a small amount of detergent. I then sift on the earth from a fine gauze strainer and soil only lands where it should, automatically. I do the same for the grass and the scenery is reasonably complete. I can add fences, telegraph poles and buildings and roads to complete it.

The layout may seem complete, but there is lots to do. Signals to install, improve the scenery, build more rollingstock, locos and structures. I suppose it will really never be completed as there is always something to build, rebuild or something new to try.

As I go in mainly for freight operation, I find that NSWR diesel locos are easier to build than steamers so thus far the NSWR roster is only a 44 class and 42 class (a Tyco F9 slightly modified and painted as a 42 class). A D58 class is under construction on an Aristo-Craft 4-8-2 mechanism, but it will probably take months to do the job if I can get around to it.

Usual operation of the line is as follows: To test the trackage on the mainline and clean the dust off the track a shunting trip train is made up in the Oatley West yard and it proceeds to the tunnel. Then if all is well, it stops there. It is now a train coming from Sydney many miles away off the layout (you have to have a bit of imagination). Now one of the locos, usually the Y6B, comes out of Loco, picks up a brake van and, if the track is clear, moves out to Gunns Gully and refuges. By this time the freight at the top of the hill has shunted Killarney Gap siding and comes down the grade to pass the Y6B. If it has to shunt the Gunns Gully siding it does so and then goes on to Oatley West. The Y6B now assembles a coal train and, when cleared, it moves off up the grade. If the track has become oily, or the coal trucks need lubricating, it may require a pusher engine. This is often done on purpose but it seldom seems to work if visitors are present. As you can see it is really a small line where you can shunt way-freights while dodging the occasional fast freight, coal drag or passenger train. These latter are rare on the PCL as they take up too much space in the yard.

Other News from "THE DOCKYARD"...

In HO steam motive power, Kumata have recently supplied both the C.B. & Q. and D.M. & I.R. 2-10-4's at $91.00 each, the C.B. & Q. 'S-2' Pacific at $73.00 and more of the old favourite, long out of stock, L.S. & M.S. Ten Wheeler at $47.00. The same shipment has also included first stocks of the International Car Co.'s Extended Vision Caboose, less trucks, at $16.35 ... Current developments in the electric traction field are numerous and latest arrivals include the Pacific Electric 1200 "San Berdoo" Steel Car, 1222 "Long Beach" Steel Car and 1370 Steel Combine, all at $31.30 each. Also to hand is the P.E. 00150 (Wire Greaser) Tower Car at $33.95 and the Sacramento Northern Parlor Trailer "Bidwell" at $28.85 ... Balboa's magnificent 'Master Series' HO S.P. 'AM-2' 4-6-6-2 Cab Ahead Locomotive is now in stock at $155.00, also in HO, their S.P. 'C-9' 2-8-0 at $73.00, S.P. 'SE-4' 0-8-0 at $73.00 and more S.P. 'S-12' 0-6-0 at $59.55 ...

New stocks from the UNITED plant include the 'Fujiyama' HO A. & L.M. 4-6-0 at $50.00, HO C.P.R. 'G-2' 4-6-2 at $63.00 and repeat stocks of both the 'Omaha' Switcher and 'Fujiyama' 36' 3-Car Passenger Set with trucks ...

From Olympia, following on the fine little HO P.R.R. 'D-16' 4-4-0 at $62.55, comes the HO C.P.R. 'D4G' 4-6-0 at $61.00 ...

Our Manager reports from Tokyo that Shinohara are now producing the Dual Gauge, HO/HOn3, Code 70 Flexible Track and stocks should be available through 'Dockyard's Australian distributors about Christmas time. Price will be $2.20 per meter length. Matching No. 6 dual gauge Turnouts will follow in 1968 and then these will be followed by Transposition Sections, of both hands, to reverse the side of the common rail ... Narrow gaugers working in HOn2½ will be interested to learn that our first stocks of the new 'Minitrains' S.R. & R.L. 2-6-2 should come through about the close of the year or early in the New Year.

Historical Scale Models, U.S.A., have delivered some fine HO scale structure kits: Santa Anita Depot at $8.90, Capistrano Depot at $10.35, Bodie Church at $8.90, Rivera Station at $8.90 and Laws Depot at $10.35. Marklin fans will welcome our latest stocks which include most of the new items.

1967/68 colour Catalogues are also now available at 40c per copy, plus postage. Recently to hand are the new 12th Edition P.F.M. (United/Tenshodo) Catalogues at $1.75 per copy, plus postage ...

In our Sept./Oct. notes we mentioned that United were coming up with a limited run O gauge loco. product. Now in stock, this is a magnificent Heavy U.S.R.A. 4-8-2. Fully sprung, with preblackened frame and honed, polished finish, detail is complete down to working journal box lids on the trailing truck! Price: $250.00 ... In HO freight car kits, Ulrich have recently delivered a number of fine products, all priced at $5.25 and complete with trucks: Standard Hoppers, P.R.R. & N. & W.; Offset Side Hoppers, S.F. & N.Y.C.; and General Service Gondolas, S.P. & D. & R.G.W. Also complete with trucks, but priced at $4.30, are Composite Gondolas, in S.F. and Pennsy heralds ...

Our range of Mainline HO kits, less trucks, now comprises: 36' Cattle Cars, Rock Island, U.P., C. & N.W. & T. & P.; 50 Express Reefers, M.P. & Renken's Milk & Cream; 36' Reefers, Pabst Beer, Bananas N.R.C.C. & Oppenheimer Sausage; 40' Reefers, Phenix Cheese, S.F. Scout, Miller High Life Beer, Swift Meats & Rath Packing Co. and finally, 42' Wood Box Cars, A.C.L., Soo Line, Spokane and S.F. All $4.00 each.

STOP PRESS: By the time this issue is out, Katsumi will have delivered our stock of full length, smooth sided, HO streamlined passenger car sets! Painted, furnished and equipped with trucks, see our Sept./Oct. notes for price and herald details. At the same time, from Northwest Short Line, will come the HO Jones & Laughlin 20,000 Gal. 3 Dome Tank Car, complete with trucks and decals.

The MODEL DOCKYARD Pty. Ltd.

SOLE AGENT AND IMPORTER

216-218 SWANSTON STREET, MELBOURNE C.1. — **32 3505**

Number 49 South

Sydney to Moss Vale - by "Loco"

This is the story of a typical steam-hauled train in N.S.W. and describes briefly the jobs of the loco crews. Model railway operatives should operate their lines with a view to realism, thinking realistically about train movements, working time tables, interconnecting movements of trains and all the other aspects of railroad working that you can find out by personal observation.

The train leaves Sydney at 3.55 p.m. and arrives at Moss Vale at 7.3 p,m., a trip of 88½ miles in 3 hours, 30 minutes approximately. This train halts at Strathfield (suburb of Sydney), then the City of Liverpool, then Campbelltown (an increasingly important and growing satellite town with a great historical background), then all stations to Moss Vale. This train runs each day, Monday to Friday, returning the next morning as No. 50, arriving at Sydney at 8.34 a.m., having left Moss Vale at 5.43 a.m.

Early in the afternoon, my mate Laurie and I book-on, get any special working notices and go to the locomotive 3813. This is one of the three green locomotives, the others being 3801 and 3830. All of the remaining locos of this class are painted black.

The 3813 is a 4-6-2 "Pacific" wheel arrangement with 69 inch driving wheels. It has 2 cylinders 21½ inches x 26 inches. The boiler pressure is 245 pounds per square inch. Total weight is 195 tons 3 cwt., and cost $106,290. The class was designed for fast passenger traffic.

On taking over the engine from the shed crew my mate checks the fire, tidies up the footplate, stowing "tucker boxes", checking water and the coal in the tender. Meanwhile, I check the moving parts outside to see that we are ready for the road. We climb aboard and are ready to leave to run light to Sydney, tender leading. We get the "O.K." and, releasing the brake, open the regulator gently by pulling it toward me and we move slowly through the yard. Once clear of the yard I open up and we pick up speed to about 20 m.p.h., join the main line and proceed to the carriage sidings and storage at MacDonaldtown; 3813 gently backs on to our train, is coupled up by my mate and we wait for the road. Signal is green; I release the brakes and we gently proceed to Platform 9, Sydney.

All of this has been done with the tender leading. Now the loco is detached from the train, we inch forward and then go forward round the loop and cross to the head of the train. Backing gently we couple up with hardly a noticeable bump. Laurie couples up the brake pipe, I blow the brakes using the automatic driver's brake valve, checking the pressure on the gauges in front of me. Meanwhile the compressor on the right hand of the smoke box is busy building up brake pressure.

By this time a gentle drizzle is falling. This will make the track slippery and will require gentle handling when we start to stop her from "losing her feet" (wheels slipping).

At exactly 3.55 p.m. we get the "right away" from the guard. Our safety valve has blasted a few minutes ago making a thunderous noise. I release the brakes, and open up the regulator, and with a sharp crisp bark of her exhaust 3813 moves out of the platform. As we slowly traverse the complex of points that make up Sydney yard, she suddenly slips, I close the regulator, open the sanding control, 3813 grips and we proceed past Illawarra Junction and pick up speed.

As we do so the driver moves the gear wheel to vary the stroke through the valve gear (rather like changing gear on a car, short strokes for hills—long strokes for fast level working).

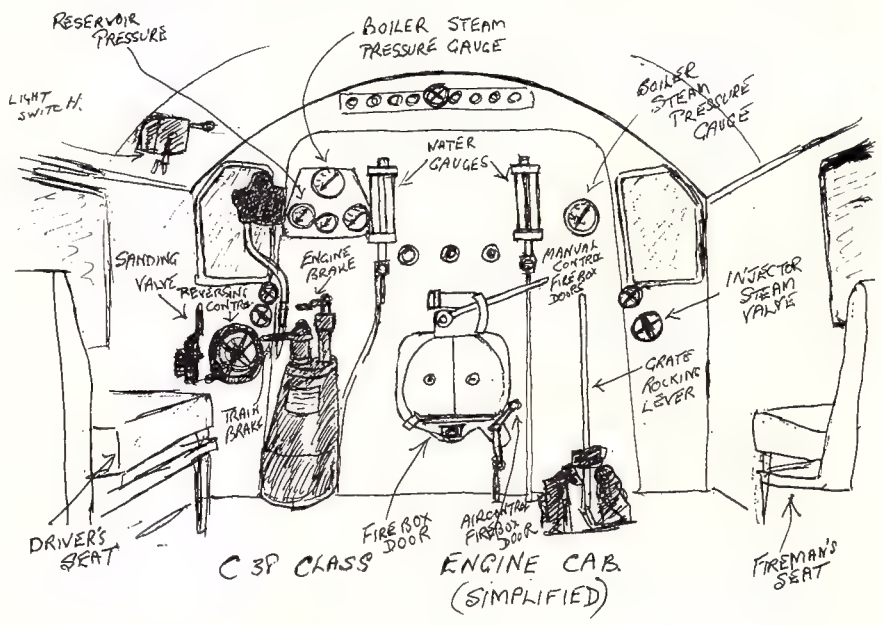
It takes 13 minutes to reach Strathfield. About 100 yards from the station I close the regulator, gently apply the brakes and we drift gently to a standstill at the far end of the platform. We then carry on for the run out of the Sydney metropolitan network, sometimes being checked by Green over Red signals indicating that the train must be stopped at the next signal. Here judicious steaming will enable us to keep rolling. While all this is going on Laurie is firing by a systematic drill, one shovelful in the centre of the fire then one in each of the four corners. He has also to operate the injector to keep the water level correct as indicated in the water gauges. In 27 minutes Liverpool is reached. Now we enter the country and can open up without much chance of being checked by electric trains. The line to Campbelltown has few bends and consequent speed restrictions and the 12 miles is run in 19 minutes.

Now we enter the section to Picton through beautiful rolling countryside. At some points we are able to drift (freewheel), opening up on the up gradients. After a minute stop at Picton the real work for crew and engine commences. It is getting dark so I reach up and switch on the head-light which happening lights up the track and the tracery of gum trees makes quite an effective backdrop.

No. 49 now passes through the first of the tunnels and the acrid, sulphurous smoke swirls around the engine and into the cab. The exhaust thunders back from the roof of the tunnel and the open firebox door sheds a golden light which combines with the smoke to give an eerie effect. As the gradients are relatively severe the fireman has to constantly tend the fire, also the injector is kept open in order to keep the boiler pressure over this section.

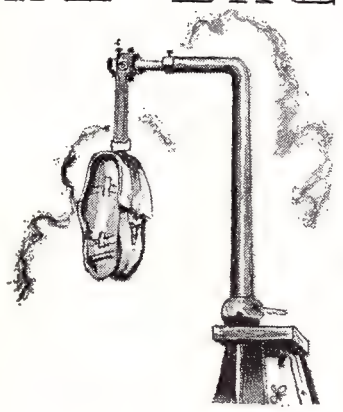
It is usual to have the safety valve emitting a plume of steam, indicating that the pressure is being maintained at 245 p.s.i. This is hard graft for the fireman. Skilful control of gear adjustment to keep the loco rolling is required of the driver. After stops at

(Continued on next page)



C 38 CLASS ENGINE CAB (SIMPLIFIED)

MAIL BAG



Sir,

In answer to Mr. Green's enquiry regarding delay in receiving his supply of New Member material from the NMRA of U.S.A., I would like to advise that due to the lack of an overseas policy by NMRA, we do not hold any supplies of material mentioned. The Executive of the former SCR, and now SCMRA, have tried in vain for over two years to have a supply of this material held in Australia for this purpose. However, I would like to assure Mr. Green, and any other potential members of SCMRA, that we anticipate that this problem will not exist in six months time. Sorry for the present delay, but it is something over which we have no control at the moment.

Terence N. Carpenter.
Secretary, NMRA

Sir,

I note in your Sept./Oct. issue that you feature plans of the HO Goods Brake Van in the narration Howard Armstrong states that "it is believed that it was the last HO in revenue service." (It being stationed at Yass).

Only a fortnight ago I saw and photographed HO15820 in the goods yard at South Grafton on the main goods siding. It was attached to some S wagons and obviously was still in use there.

Perhaps other country readers have also spotted HO's still in service.

Many thanks for printing this plan as I have for some time wished to model an NSWGR guards van of this sort.

— RICHARD HOWARD
Glenbrook, N.S.W.

Sir,

As regards further prototype track layout articles for A.M.R.M. the response for more of these is most gratifying. But at present I find myself unable to scout around for more. May I offer a suggestion however, that readers who think their home town railway station layout is suitable, write down a description with sketch of layout, and send either to you or myself to be drawn up for reproduction. Also a few photos to give the article a bit of life. Steven Morris suggested a similar idea in July-August issue.

Re R. Jones questions of sketches of station buildings and water tank in Sept.-Oct. issue. I will endeavour to fill these in at a later date, although the water tank should not be hard to visualize.

It might also be a good idea Mr. Editor to reprint the directions for sending an article in for production.

I suppose it best to mention here not to send in large track layouts which would be unsuitable for modelling. Here now is a chance for some interstate readers to put their State on record, as my own opinion is that we in N.S.W. are getting a good share of the articles, plans, etc., not that we mind either.

— WARREN WILLIAMS
Canley Vale, N.S.W.

Sir,

I have just recently received the ballot from the NMRA concerning alleged happenings in the NMRA organisation in Australia. The ballot appears rather biassed and besides the time element from date of receipt to the closing date with the use of surface mail is almost a rigged ballot. The earliest mail available here in Adelaide was 27th December. I sent my ballot paper air mail with a covering letter suggesting that the ballot should be declared null and void, plus a few other comments.

Personally I have been critical of the NMRA, as the Australian member pays a lot for very little when it is all closely analysed. The NMRA can only pressure U.S. manufacturers, and besides, with 95 per cent of membership in the U.S.A., they are not going to give overseas members much of a run. I hope the SCMRA succeeds and I can see no reason why it cannot be associated with all clubs and groups in Australia, even if these groups only use it as their official news outlet. This should really be encouraged and an occasional club directory in the magazine might help. There is no reason why it cannot cover the historical boys as well as the model and experimental engineers as long as the background is railways or model railways.

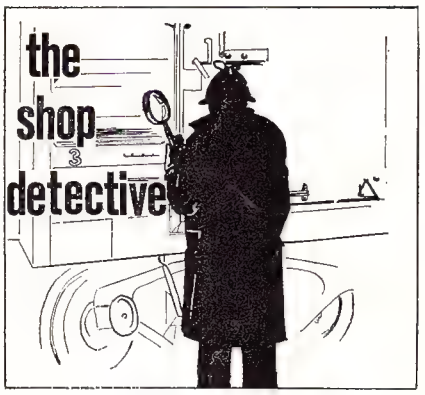
(Name and address supplied, but withheld at writer's request).

(Ed. note.—The secretary of SCMRA advises that he has received quite a number of letters on the above mentioned subject).

No. 49 SOUTH (Continued)

stations with romantic names like Yanderra, Yerrinbool, Aylmerton we reach Mittagong, then Bowral. From Burradoo we speed into Moss Vale having completed the last five miles in 7 minutes. As 3813 approaches Moss Vale across the flat run in, I close the regulator and we drift into the station applying the brakes gently. In the platform a further application of brakes and we roll to a stop with the hiss of brakes along the train. After the passengers have left we move out of the station onto the bridge.

The points are set and we back the train into the storage siding. Laurie uncouples 3813 and we pass through the station on the up relief line to the turntable. The loco is turned and moves into the loco siding where the fire is raked and ashed. The fire is banked and 3813 is shut down and left in the capable hands of the yard-man to be ready for the return trip on No. 50 in the morning.



So many remarkable things are happening at the Model Dockyard that it is difficult to choose specific items. There are sets of 6 HO full length, painted, passenger cars by Kumato, in that excellent finish one has come to expect as standard from this manufacturer. Later in the year you will be able to obtain these cars singly, so order now.

The latest delivery of unpainted brass locos from Japan include the D M & I R 2-10-4, and C B & Q 4-6-2, and for the tramway bloke there is a tower car, also unpainted. One of the Dockyard staff has painted one of these cars for display purposes, so ask to see it.

In 'N' gauge Sekisui has delivered the die cast Also P A units. These little beauties weigh in at 8 ozs., and are, I'm told, excellent performers, ideal for long freights or for conquering those steep grades we are sometimes obliged to include in our table top empires. Several road names should be available when you read this.

Robilt propose to produce more of their 'O' gauge clockwork loco-and-tender units later this year. These are extra good 'beginner' sets for the mini members of the family, an ideal birthday gift. Some track is already available.

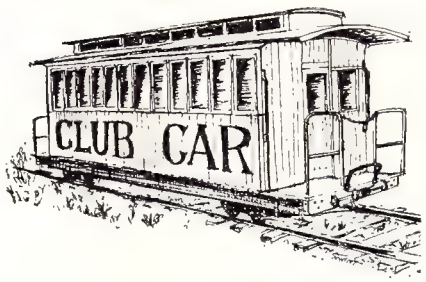
* * *

Melbourne Sports Depot is still straightening up after the Christmas rush at this time of writing, and their junk box appears quite interesting. I notice several 3 rail 0-4-0 tanks, and odd bits of rail, among other things. Their display cases still contain many lovely locos, and a large variety of rolling stock. Included is a line of low priced freight cars with sprung trucks, a fine addition to any HO railroad.

Here you may also obtain the Sentinel 'N' gauge points, and Lima 'N' gauge rolling stock. I also noticed some good looking semaphore signals in HO, and modern fluorescent lamps in the same scale.

* * *

Looking for P M G switches? Try Walthams Disposals. Various other types of switches, too, and lots of transformers, which could be the answer to your power problem. These items are all used, but in good condition.



S.C.M.R.A. ACTIVITIES

Eastern Division Notes

Meetings will be held at the following members' homes in the Sydney area.

February 10th — Warren Wormald, 168 Holden Street, Canterbury.

March 9th — John Beckhaus, 145 Orimbah Road, Mosman.

April — No meeting this month due to the "Model Railway Convention".

May 11th — Rod Tonkin, 7 Park Ave., Oatley.

June 13th — Bryan Fowler, 11 Pearce Street, Baulkham Hills.

OTHER CLUBS

WOLLONGONG MODEL RAIWAY CLUB. Club Representative: Lyndon Spence, 71A Campbell St., Wollongong, N.S.W. 2500

Since our last item in Club Car, Dudely Wilkinson's section of the exhibition layout has been dismantled. A new exhibition layout is being built and, as in the case of our original one will also serve as an integral part of the Club layout. Our new exhibit is in six sections and is approximately 10' x 16'. It is basically two ovals with respective holding yards and one higher level which joins the mainline on the Clubhouse layout. If construction continues at the present rate it should be ready for the Wollongong Police Boys' Club's next annual Hobbies Exhibition. We could not make it last year but we will make up for it this year.

We would like to take this opportunity to welcome Alan Thompson and Terry Irons. Both are N.S.W.R. men and are working on a new section of the Club layout which will consist of diesel service shops and facilities. Meanwhile our steam loco is taking shape on Bodo Schwarz' section with a 9-stall roundhouse being erected (3 Vollmer Kits).

As this is being written we still have not solved the case of the mysterious gremlin who has been erecting bridges and station platforms in our absence. No one seems to know who it is, but we have no objections because he isn't doing a bad job!

FLINDERS MODEL RAILWAY SOCIETY. Hon. Sec.: Laurie Jackson, 74 Cuthbert Street, Broadmeadows, Vic. 3047.

Highlight of the meeting held on 11th November was the presentation to Peter Davies of the Achievement Award Programme Certificate for Master Builder Cars. This presentation was made by Jim Blaney, the official representative in Victoria for the Achievement Award Programme and brought the total awards gained by our members to 13.

The open building competition was well patronised and after some difficult decisions, the judges, Charlie Huggard and Peter Davies, came up with these decisions:

Beginners' Section: 1st, Ian Weickhardt for his colour light signal gantry in ¼" scale.

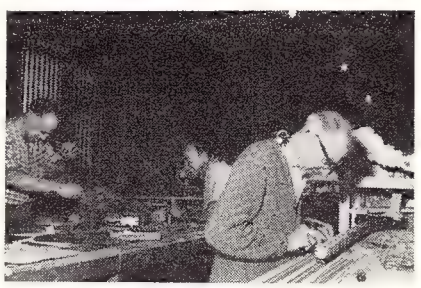
2nd, Keith Nelson for a model in HO scale of a VR 'Z' van.

Advanced Section: Jim Blaney swept the board here with his TT scale models of a VR State car 'Melville' and a VR van.

All the models entered were of a very high standard and gave us encouragement to press on with our programme of scratch-building classes in the new year. Following this, Laurie Jackson outlined the Achievement Award requirements in each category, emphasising that the Programme was not designed to be competitive; it was designed to recognise the standards of workmanship attained by the members of NMRA and to act as an encouragement to them to delve into those facets of the hobby that they were not so proficient at.

Russ Siddall produced a near completed model of the 'T' class diesel that we have been slowly building over the last few months. He struck a patch of bad luck when it came to the paint shade, but this did not detract from workmanship that had gone into the building of the model. The paper work this time was provided by Laurie Binns who dealt with the adaptation of the side frames for the bogies of the 'T' class.

To Club Officers: These pages are available for the dissemination of news about your societies. Brief news about activities will be welcome for these pages. Closing date is fifteenth of month prior to month of issue



Bodo Schwarz, Fred James, and Dudley Wilkinson at work in the Wollongong Model Railway Club rooms.

One of our younger members came along with a query on layout design and whilst we did not entirely solve the problem we gave sufficient ideas (both genuine and facetious) to work on.

An excellent afternoon was suitably rounded of by equally excellent refreshments by Mrs. Barker to whom we extend our thanks for the hospitality shown to us.

Congratulations to Stuart Barker and Russ Siddall on their success in the VMRS open competition held on 15th November. Stuart took off first prize in the vehicle section and that infamous blue prevented Russ from taking the prize in the Loco section.

Saturday 25th November saw a group of us wearing best bib and tucker parade at the Hotel Cecil for dinner and an evening's fun and entertainment. The dancing girls provided the idea of modelling Arabian railways, though some members were more interested in the prototype than the model! Anyway, a good evening was had by all and we promised ourselves that we would meet round the table next year.

2nd December took us way down south to Chelsea to the home of Ray Hiho, for the prime purpose of presenting certificates to those who had been successful in the competitions held during the year. In the absence of our President, who was engaged in that spare time hobby of all modellers — work, the certificates were presented by Russ Siddall.

The names which appeared on these certificates were — Jim Blaney, Peter Davies, Charlie Huggard, Laurie Jackson, Keith Nelson and Ian Weickhardt.

The competition programme for next year is as follows:

February — A small lineside structure, i.e. ganger's hut, railcar house, little house or similar structure.

May — a passenger car, any prototype.

August — a locomotive, either diesel or steam.

November — subject open — anything goes.

The best model of the year will be awarded a trophy to be competed for at the December meeting, entries will be all prize winning models entered during the year.

All models entered in all competitions will be judged on the basis laid down in the Achievement Award Programme which will enable members to gather the necessary merit certificates which will eventually lead to the Achievement Award certificate which is quite a handsome one these days and most suitable for framing.

A transistorised throttle made by one of the youngest members was displayed and tested and came in for very favourable comments from all.

Ray's embryo layout came in for a lot of inspection, some serious, some flippant. We were all interested in the cast concrete piers on the bridge leading from the main yard, they certainly are solid and should not collapse under the strain of his trains!

We were very happy to have a couple of visitors from interstate at the meeting and we hope that they enjoyed their stay in Melbourne. Our thanks are extended to Mrs. Hiho for the hospitality she showed to us.

The next meeting will be on Saturday, 3rd February, 1968, at 74 Cuthbert St., Broadmeadows and will be the Annual General Meeting, and the first of our building competitions for the year.

The venue for March is not yet definite, but it will include an auction.

April 6th will see us back in Glenroy at 65 Farview Street, the home of Charlie Huggard.

Saturday, 4th May, takes us to Jim Blaney's and will be the day for our second competition of the year.

The June meeting needs a home. Any offers?

UPPER BURNETT MODEL RAIL CLUB. Secretary: Clive F. Morgenstern, Monto, Qld. 4630.

Happy New Year to Railway Modellers everywhere!

1968 is upon us and with the New Year several new ideas have been planned or put into effect to improve and expand the U.B.M.R.C's activities.

On Saturday, 21st October, 1967, we staged a Model Railways Display in Biggenden as a part of a Rose Festival conducted there. Transporting seven layouts 140 miles proved no easy task and

much was learned by the venture. All layouts were moved by rail with no damage whatsoever, for which we were most grateful. We did find that the club layout (the Oyster Hill and Eastern) was most cumbersome and most difficult to move and, for that reason, in particular, the layout is to be dismantled and rebuilt first thing in the New Year. We have also found that the OH and E in its present form was not really satisfactory for timetable operation. Both of these (and other) faults have been taken into consideration in planning the new OH and E.

The Biggenden display proved quite successful and we were quite proud of our effort. We feel, however, that it could have been more so had it been open for a longer period than the half day. We had been rather apprehensive about setting up the display so far from home; but it proved that such a venture was not impossible. The seven layouts exhibited included three HO, two T.T. and two N gauge.

Unfortunately we have suffered a drop in membership during 1967 due to transfers away from the district. We hope to remedy this fall by holding a rather intensive membership drive early in 1968. We know of two youngsters in town who have received some Tri-ang trains for Christmas so that they can watch Dad wear the trains out, so we look to Dad as a prospective club member. Doubtless the same will happen in several other homes.

We are hopeful that a number of film evenings could be arranged during the year, but we have experienced some difficulty in obtaining suitable films. If any readers are able to advise us of a source of films dealing with Railways (model or prototype) we would be grateful to hear from them. We have among our members, one who owns a 16 m.m. sound projector and another with an 8 m.m. projector.

Due to the hot days of summer our meeting days have been changed from Saturday afternoons to Wednesday nights, although it seems that we may yet have to make another alteration, at least temporarily, whilst the framework for the new layout is constructed.

YARDMASTER

BULLETIN OF THE SYDNEY MODEL RAILWAY SOCIETY

NOTES OF THE SYDNEY MODEL RAILWAY SOCIETY

GENERAL NEWS

Well, Christmas has come and gone for another year.

At the Annual Christmas Meeting on Monday, 18th December, the President, Paul Simpson, wished the members and their friends the Seasons Greetings on behalf of the committee.

The evening programme of films was on Japan featuring railways and general tourism of that country and the films were very well received.

It was good to see so many members present and a pleasant night was had by all. Once again the soft drinks were brought in by Lionel Glendenning, also the party ice for cooling the drinks. Thanks Lionel.

As this is written the opening night in 1968 is scheduled for Monday, February 12. Members will be notified of any change of date in the usual manner.

"O" GAUGE NEWS

No new items have appeared since the last Yardmaster issue. Paul Simpson has recommended that prior to the commencement of running, members should devote two to four nights giving the layout a thorough going over both for wiring defects and track maintenance.

Both are getting into disrepair and operations could come to a full "STOP" if unattended, consequently it is advisable that this work is done before major deficiencies occur. The track in places needs new point blades and crossing frogs, plus a certain amount of new wiring which cannot be further deferred.

So let's see if for once we all can work on the layout and so give another 20 odd years of service before it needs it again. Bring your own tools of trade. — John Bowen.

"HO" GAUGE NEWS

HO members had during the last few nights in '67 some interesting running through the timetable program, aided by a good roll up of members with a fair proportion of rolling stock and locos of NSWGR variety. As more NSWGR model equipment is placed on the layout, the American types are being eliminated from the layout tracks.

Two members who passed with honours in '67 were Dennis Sherring for his work on junction board and signalling, (thanks a million, Dennis, from all members) and Arthur Wheatley for his mighty efforts in experimenting and producing of construction.

In '68 we are expecting, with keen anticipation, some operation to timetable along the real size pattern. The roster familiarisation plan, which progressively moves each member to a new operating position as he becomes adept with the total operating procedure of each board or control point is, I think, a practical method of training every participant in overall control as is the idea to have an older member as a supervisor-cum-chief dispatcher of operating procedures each running night.

After a reasonable practice period members will be expected to advance beyond straight timetable running of trains to more intricate freight marshalling and wayside drops and pick-ups, which will give the members more enjoyment and interest in capturing the real railway operating scene. Additionally, the skill necessary in planning shunting movements is an essential ingredient that will make this model railway hobby in '68 one of the most rewarding experiences for members who enjoy the friendships of like-minded model rail enthusiasts.

We start '68 without our very popular member John Huxtable who was well respected as a keen modeller who specialised in producing exquisite NSWGR rolling stock from the rubber mould method in both HO and N gauges. He will be leaving a tangible token of his enjoyment as a clubman in the LLV's wagons for club use that we will all be marshalling up in goods train consists on operating nights.

John will be medically examining prospective migrants wishing to settle in Australia and we all wish him and his wife and young family an enjoyable sojourn in Europe. We hope he will model NSWGR prototype and not be contaminated by Swiss and other Continental trains. We will all be looking forward to when his term of duties are finished and he will be back with us once again.

— Lionel GLENDENNING.

MAGNIFICENT 35MM SLIDES OF QUEENSLAND NARROW GAUGE CANE LOCOMOTIVES

No. 197 "VALDORA"

Pictured above is one of eight colour slides available of the steam locomotives which over the years have hauled the cane trams in the Nambour area of Queensland. Some of these locomotives have now been retired and pictures such as these will never again be available. All lovers of narrow gauge locomotives should have this collection of fine pictures.

Slide No. 190 "SHAY"
Slide No. 191 "BLI BLI"
Slide No. 192 "COOLUM"
Slide No. 193 "EUDLO"
Slide No. 194 "MAROOCHY"
Slide No. 195 "MORETON"
Slide No. 196 "PETRIE"
Slide No. 197 "VALDORA"

Prices:

Set of 8 $3.30 posted
Single 45c posted

TRANS-AUSTRALIAN RAILWAY MEDALS 50th ANNIVERSARY 1917-1967

These beautiful medals are now available in bronze, silver and gold. A limited issue only is being made and the silver medals will be serially numbered. Each medal is supplied in a deluxe plush case with suitable inscription in the lid. The medals are 1¼" in diameter.

Prices:

Bronze: $4.00

Sterling Silver: $10.00

Gold: Price on application

(Prices include deluxe case and postage)

As production is limited early application is advisable.

RAILROAD BOOK COMPANY OF AUSTRALIA,

189 Homer St., Earlwood, N.S.W. 2206.

THE MARKET PLACE

12 words for 30c. Extra words 2c each. Name and address free. Cash with copy. No charge to S.C.M.R.A. members. Closing date: 15th of preceding month (e.g. 15th July for August issue).

FOR SALE

FERRIS O GAUGE goods complete with transformer plus extra rails. Trix Twin set with three locos, goods and passenger carriages, plus extra rails, crossovers, points, etc. It also has two transformers and master control switches. HO gauge Marklin Diesel loco, steam loco, goods and passenger carriages, transformer, extra rails, points, etc. Accessories, trees, fences, trucks, cars, stations, houses, etc. Saturday only. SAE for list. Haynes, 15 Kihilla Road, Auburn, N.S.W. 2144.

OVER 100 modellers receive "N Gauge News". Send 5c stamp for sample copy. Lists all available items and new releases. We are also working on NSW prototypes in HO. Send a post card on what you would like to have in rolling stock. Coming soon precut stockyard in N and HO. Austral Modelcraft, 101 Laura St., Ekibin, Qld. 4121.

MODEL steam Locomotive detail blue prints. Also castings, all gauges. Outline blue prints 7mm scale. Bolton, 70/72 King Street, (4th floor), Sydney. 2000. Catalogue 85c.

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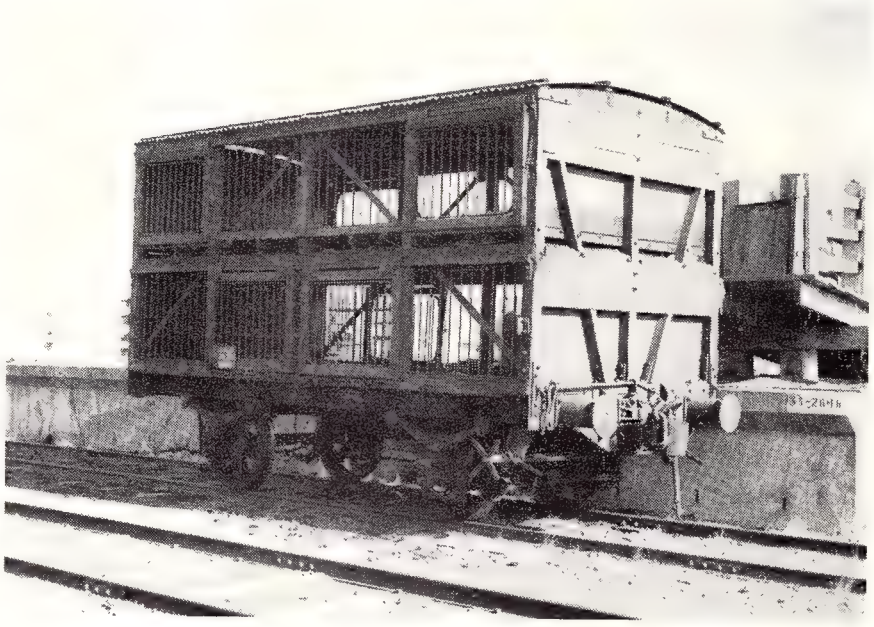
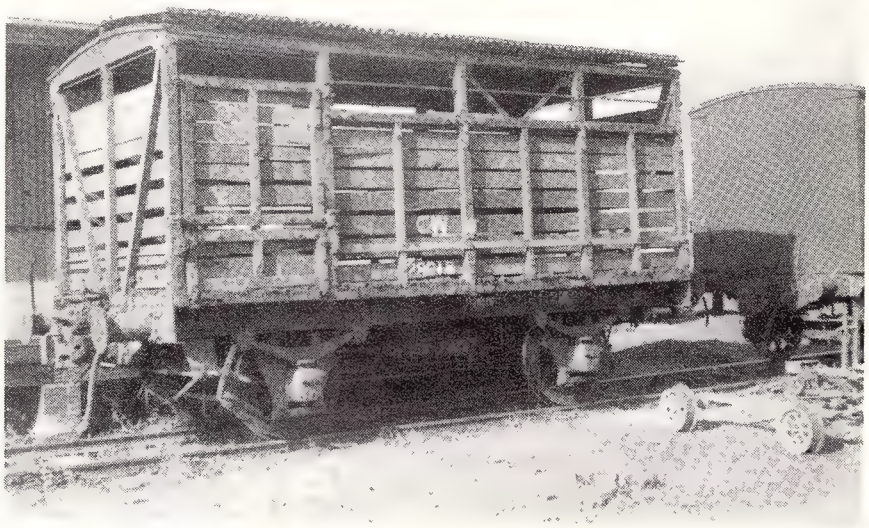
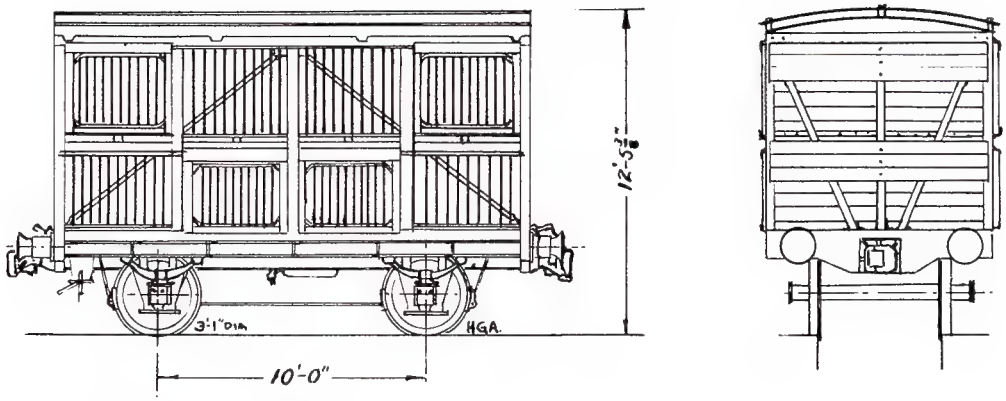
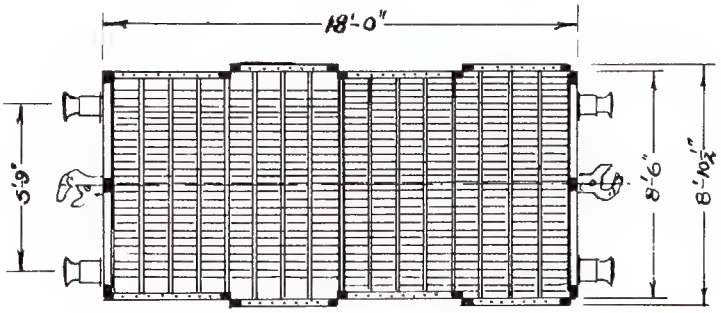




N.S.W.G.R. STOCK VANS

Our Plan opposite, shows the two types of four-wheel stock vans used on the N.S.W.G.R. Both these vans offer a real challenge to the scratch-builder. *(Plans and photographs by Howard Armstrong).*





N.S.W.G.R.

SHEEP VAN CODE: 'GSV'

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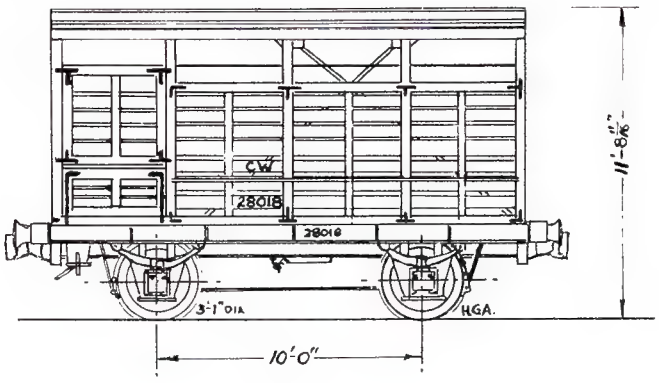
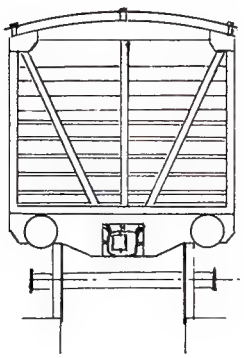
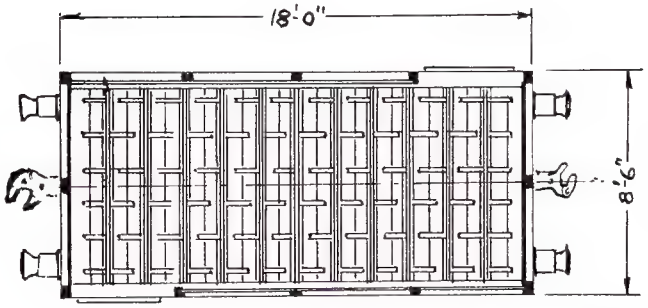
Scale 3·5mm = 1 foot.







N.S.W.G.R.

CATTLE VAN CODE: 'CW'

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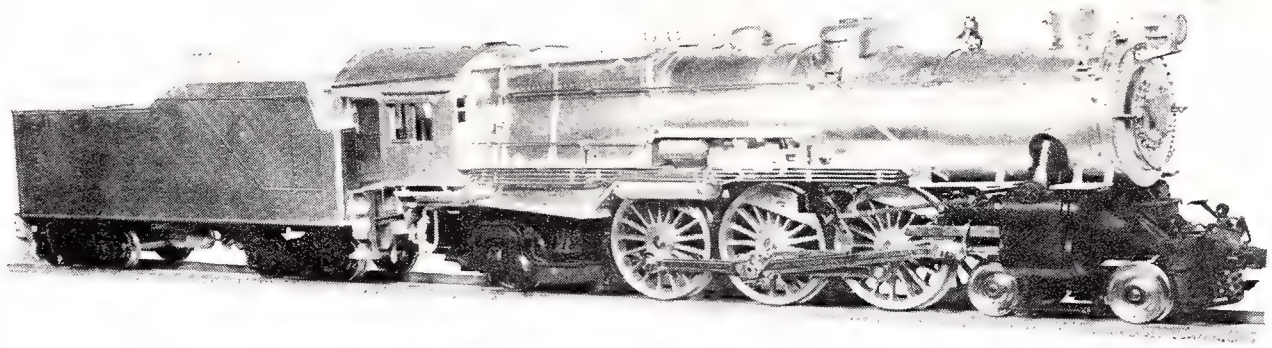
Registered at the G.P.O. Sydney for transmission by post as a periodical

Incorporating "THE BOOSTER"
Price: 30 cents
Single Copy
MARCH/APRIL, 1968
Vol. 3, No. 31
$1.20 p.a. to Members of S.C.M.R.A.

RECENT DEVELOPMENTS IN 'O' GAUGE...

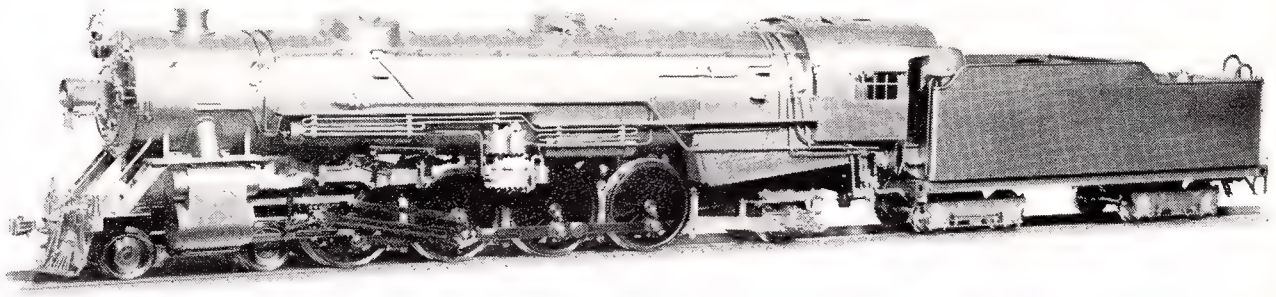


— OUTSHOPPED BY KATSUMI — P.R.R. 4-6-2 K-4 PACIFIC

Finished with pre-blackened frame, pilot, pilot deck, running gear, trucks, etc. Fully detailed externally, down to brake hangers and shoes. Fitted with sprung frame, water scoop, working headlight and detailed cab back-head. Overall length, 21½"; weight 9 lb. **PRICE: $228.55.**

OTHER NEW ARRIVALS FROM K.T.M.: N.Y.C. 'J3a' Conventional Hudson Loco at **$250.00,** U.P. 4-8-8-4 "Big Boy" Loco at **$430.00**; Ore Car with Ribbed Sides at **$15.55**; Double Dome Tank Car at **$14.75**; A.C.F. Type Hopper Car at **$20.95** and P.R.R. Quad Hopper Car at **$20.95.**

COMING: N.Y.C. 4-8-4 Niagara, C. & O. 2-8-4 Berkshire and B. & O. 0-4-0 'C-16a' Switcher.



— OUTSHOPPED BY 'UNITED' — U.S.R.A. (HEAVY) 4-8-2

Meticulously finished in every respect and fully dressed externally in U.S. investment castings. Pre-blackened, sprung frame. Trailing truck fitted with working journal box lids. Detailed cab interior. Honed, lacquered finish. Overall length, 22". **PRICE: $250.00**

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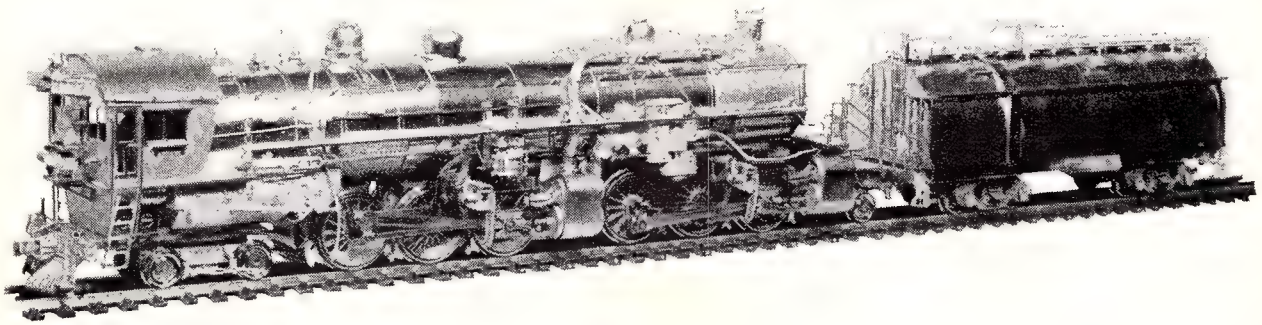
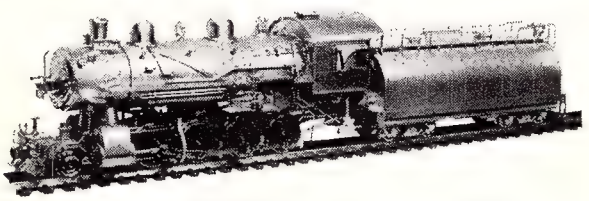
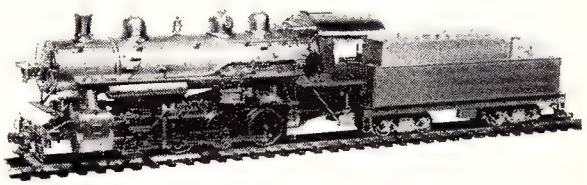
RECENT DEVELOPMENTS IN 'HO' GAUGE . . .



HO, S.P. 'AM-2' 4-6-6-2: The first in the 'Master Series' hand crafted line to be introduced by Balboa Scale Models. Featuring a wealth of custom parts and prototype reproduction which can only be re-created by individual hand making. All drivers sprung and powered. Overall length, 14½"; weight 2 lb. **PRICE: $155.00.**

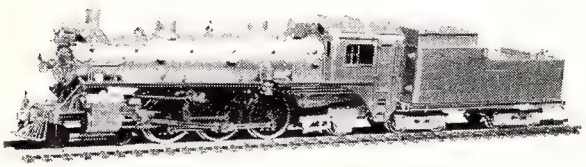
HO, S.P. 'C-9' 2-8-0: Built to the order of Balboa by Katsumi, this powerful Consolidation is distinctive with its whaleback tender. Sprung frame. Overall length, 10"; weight 1 lb. 2 oz. **PRICE: $73.00.**





HO, S.P. 'SE-4' 0-8-0: Built in the S.P.'s Sacramento Shops in 1930 and 1937, these heavy duty Switchers, with 'clear vision' tenders, are introduced to HO fans by Balboa, in conjunction with K.T.M. Equipped with special gearing for realistic yard operation and sprung frame. Overall length, 10"; weight 1 lb. 5 oz. **PRICE: $73.00.**
(Also now available — repeat run of S.P. 0-6-0 Switcher at **$59.55**).

HO, C.P.R. 'G-2' 4-6-2: Although not illustrated in the P.F.M. Catalogue, this locomotive is manufactured by 'United' for P.F.M's. Canadian Distributor. Finely detailed and equipped with sprung frame. Honed, lacquered finish. Overall length, 10½"; weight 1 lb. 5 oz. **PRICE: $63.00.**



Other News from "THE DOCKYARD" . . .

Kadee have recently delivered the new MKD-14 HOn3 Delayed Release Couplers at $1.75 per 2 pairs, along with the No. 309 HOn3 Permanent Magnet Uncoupler at $1.75 per pair. As well as general stock replenishments, other new items in from Kadee are the No. 308 Hidden Permanent Magnet Uncoupler at $1.60 each and No. S-350 Centering Springs for MKD-6, 7 and 8 Couplers at 45c per dozen.

In addition to Single and Double Bracket Line Poles, and coils of nickel silver and bronze wire, with the growing interest in HO traction modelling, we have now added 'lost wax' Trolley Turnout Frogs and Line Hangers. The Hangers come in three types, comprising: Curved Line, Straight Line and Hangers suitable for pantographs as well as trolley poles. Price is $1.45 per dozen, any one type. Frogs come at 25c per pair. These Frogs and Hangers are also suitable for O gauge traction modellers.

New arrivals from Kumata, in HO, include the F-M 'Trainmaster' 2400 h.p. Diesel Loco at $47.25 ea., Alco 'RS-1' 1000 h.p. Diesel Loco at $47.60 ea., P.R.R. 'N.S.' Steel Caboose (less trucks) at $13.55 ea. and U.P. 2-8-2 Mikado Loco and Tender at $73.25 ea.

In 'N' scale, the keenly awaited Sekisui Alco PA-1 "A" Unit Diesel Locomotive is now in at $15.75 ea. Heralds are: S.P., S.F., G.N. and P.R.R. Also in is the 50' welded-side, panel door Box car at $2.75 ea. Road names are: Soo Line,

(Continued on page 16)

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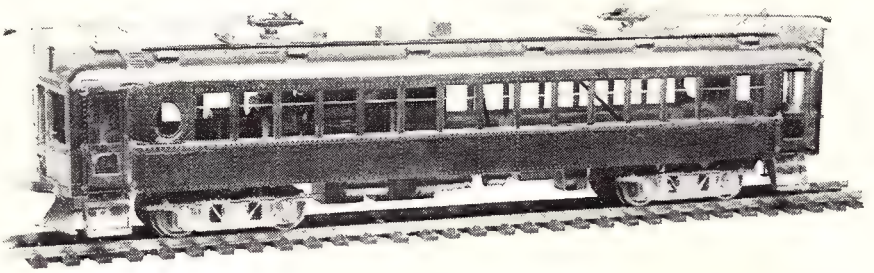
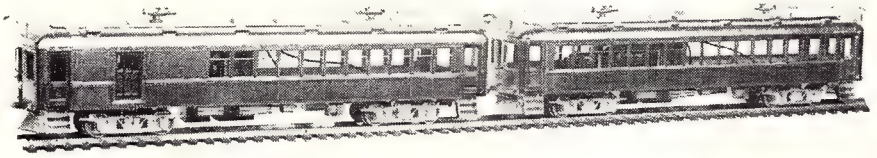
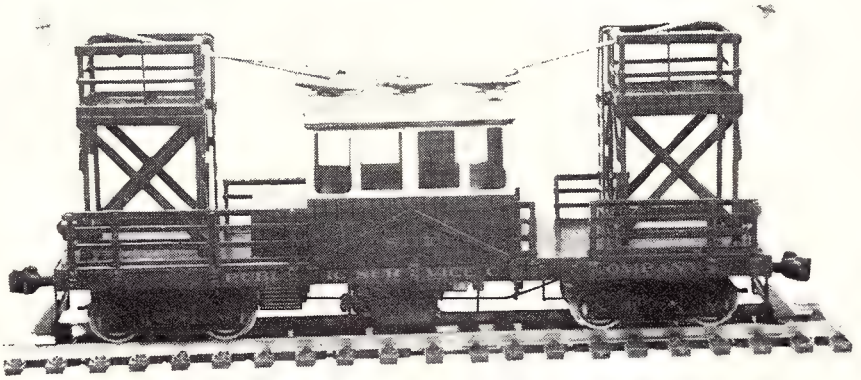
P.E. 1200 CLASS STEEL CAR: The first group of 1200 class steel cars were the 22 coaches and two "combos" built for the P.E. by Pressed Steel Car Co. in 1915. Equipped with lavatories for high speed long distance service on the 60-mile San Bernardino line, they could roll along at speeds up to 80 m.p.h.! **PRICE: $31.30.**





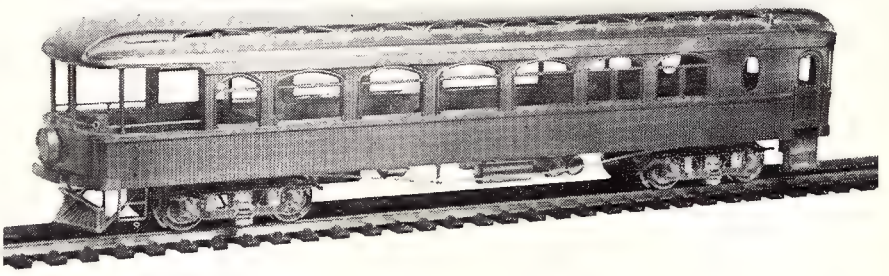
P.E. 1370 COMBINE AND 1222 COACH: The second group of 1200 class steel cars, built by Pullman, were not provided with lavatories, hence, unlike the original group, all side windows were rectangular. The 1370-71 "Combos" were built with the first group but as we see here, match up just as nicely with the second group. **PRICE (EITHER CAR): $31.30.**

Constructed of heavy gauge brass, these Cars are beautifully detailed and are powered by husky 5-pole motors, with twin spring belt drive to single geared trucks.
Trucks are equipped with drop forged side frames, giving razor sharp detail. Bodies are fitted with all necessary bulkheads and working trolley poles. Finished to N.M.R.A. Standards, ready for the paint shop. 12V. D.C. 2-rail or trolley. Minimum curve 10" radius - 12" recommended.



P.E. 00150 TOWER CAR: An extremely interesting item for the maintenance of way department, this car is designed for overhead line greasing service, the third pole feeding the lubricant in the case of the prototype. Towers enable repairs to overhead trolley and fixtures, on open track. **PRICE $33.95.** (View shows painted and lettered model owned by M.D. staff member, Mr. B. George).

S.N. PARLOR TRAILER "BIDWELL": A rebuilt Niles car shopped due to accident damage, this handsome Parlor Observation Trailer, "Bidwell", was placed in service during 1915. A fitting car to round off the 'limited' interurban train — suitable for steam service too! **PRICE: $28.85.**



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THE AUSTRALASIAN MODEL RAILROAD MAGAZINE

Vol. 3, No. 31, MARCH/APRIL, 1968

AUSTRALIA'S LEADING MODEL RAILWAY MAGAZINE

THE OFFICIAL JOURNAL OF NMRA IN AUSTRALASIA
Incorporating THE YARDMASTER, The Bulletin of the Sydney Model Railway Society.

CONTENTS

	Page
WE VISIT MALAYAN RAILWAYS, by Jeffrey G. Barclay	8
SIMPLE METHODS OF ACHIEVING REALISTIC SCENERY, by Ian G. Petherick	10
A DISPLAY UNIT FOR HO MODELS, by P. F. Kelly	12
AND THEY CALLED THEM "PIGS", by Paul Rogers and Howard G. Armstrong	13
N.S.W.G.R. ALUMINIUM WHEAT WAGONS	16
FLEXI-VANS A HUGE SUCCESS	17
A VINTAGE ALCO, by Paul Rogers and William Tyers	18
THE DIESEL ELECTRIC LOCOMOTIVE, by "Loco"	19
THE RAILWAYS OF TASMANIA	20
"WHAT IS AVAILABLE IN N SCALE?", by Paul Van Leuven	24

REGULAR FEATURES:
On the Cover, p. 5; Armchair Review, p. 6; Shop Detective, p. 6; Club Car, p. 25; Mail Bag, p. 25; Market Place, p. 26; Our Plan, by Howard G. Armstrong, p. 26.

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CONTRIBUTIONS: Articles, drawings, and photographs are welcome. Accepted material is subject to whatever changes are necessary by the Editor to meet the requirements of this publication. The contents of this magazine must not be reprinted without written permission of the publishers.

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Editorial

Many railway modellers and other interested persons have commented on the cost of membership and relative benefits provided by the National Model Railroad Association Inc. (USA) and the Southern Cross Model Railway Association Inc. (NSW).

The Executive Council of SCMRA has received considerable correspondence over recent months suggesting that SCMRA membership be available to ANY individual without the obligation of being a member of any other organisation.

The previous arrangement for all members of NMRA paying US $5.00 p.a. for membership dues has been proved by the Canton, Ohio office to be insufficient to support, from North America, an overseas member of the Association.

As NMRA membership was a prerequisite for SCR and subsequently SCMRA membership, any individual who desired to belong to, and support the local organisation, was required to pay both NMRA and SCMRA dues.

Since overseas members of NMRA (that is those members not living in North America), who follow local prototype railway working instead of, or as well as North American, receive very little other than printed matter in the way of membership benefits (and this printed matter costs NMRA in excess of US $5.00 p.a., including postage) the Southern Cross Model Railway Association now offers membership to any person for the SCMRA subscription alone, without any prerequisite affiliation with any other organisation.

Overseas technical information considered to be of interest and/or value to local modellers will be supplied to members of SCMRA. For further information, please send self addressed, stamped envelope to: The Secretary, SCMRA, P.O. Box 107, Lakemba, N.S.W. 2195.

The Treasurer of SCMRA will continue to forward monies to Canton for and on behalf of any member of NMRA.

STOP PRESS

Extract from NMRA Staff Newsletter, Vol. 7, No. 9. March, 1968:

"... At the Mid Year BOT Meeting, a representative from SCMRA was present in the person of Peter Woolley, who flew in to attend the meeting and straighten a lot of misunderstanding. I am very happy to report that the question has been settled to the satisfaction of both NMRA and SCMRA. A full report will be published as soon as the tapes have been transcribed and analysed. I don't want to rely on my memory at this stage."

Signed: C. B. KENT Jr., Sec. NMRA.

On the Cover...

Robynne Nelson is fascinated at the little people she sees on the layout of Alan Taylor of Punchbowl, N.S.W.

ARMCHAIR REVIEW

Contributions to this column are welcomed.

LOCO DRAWING

NSWGR 38 CLASS DRAWING.
Published by N.S.W. Rail Transport Museum, Box 1983, G.P.O., Sydney, NSW, 2001.

Every railway enthusiast should have a 38 Class locomotive in his home; at least a framed picture on one of the walls. This excellent wash drawing in three colours by Donald Fraser measures 15" by 5" printed on excellent paper. Ideal for posting to friends overseas. Definitely worth 60 cents posted.

BOOKS

DIESEL SPOTTER'S GUIDE, by Jerry Pinkepank, 300 pp., illus. (8½ x 5½). Published by Kalmbach Publishing Co. $3.50 U.S.

At long last the railfan-historian has a basic diesel locomotive reference source, the "Diesel Spotter's Guide", researched and written by Jerry Pinkepank, long-time diesel expert, and published by Kalmbach Publishing Company.

With 304 pages, an excellent index, and 312 action and builder's broadside photos, the fan or historian attempting to trace the development of diesel motive power in general, or on a specific railroad will now find his task made easier by the "Diesel Spotter's Guide".

As the railroads have now entered the "2nd generation" of diesel motive power, a reference such as this makes it possible to determine the difference among the many makes and models of this type of motive power. In the '30s, '40's and '50's, diesels replaced steam locomotives; now the first generation of more specialized diesels are in turn being replaced by youthful, general-purpose locomotives. "Diesel Spotter's Guide", in text and detail photographs, enables the fan to determine such things as: builder, model number, engine type with number of cylinders and horsepower, dates of production, number of units produced, and differences among the units. Also taken into account are changes from one basic model to another, as well as developmental changes within a model run.

As "bonuses", the "Guide" goes back to 1918 when diesels were in a relative state of infancy, yet is up-to-date enough to cover all current modifications made on stock locomotives to better suit them to operating conditions peculiar to a railroad's specific needs. The production of builders which made as few as one locomotive is covered, as well as the production of builders which turned out diesels by the tens of thousands. Fifteen different types of trucks which have been used under many thousands of diesels are examined in text and photo, making identification less difficult, as it is relatively common for one make of diesel to ride on trucks from a totally different make.

This wealth of factual information for the railroad researcher can be found in no other single source. At $3.50, the "Diesel Spotter's Guide", is a welcome addition to the literature of the field.

BUILDING AND OPERATING MODEL RAILWAYS, by Alan Johnston and Bill James, 208 pp. illus. (6¼ x 9¼). Published by K. G. Murray Publishing Co. Pty. Ltd. $4.75.

"...But this is not a book for the established experts..." — so says the fly leaf of this locally written and published book.

However, for any one contemplating building or expanding a layout, this book could quite easily provide you with some new ideas and information. The cost of the book alone would be more than recovered if anyone follows the instructions and advice given. The large number of photographs and diagrams further improve the value and usefulness of this publication. Chapters include a summary of the various gauges and different manufacturers products which are compatible — both mechanically and electrically.

Useful tips for laying trackwork — both snap track and flexible track are given, along with precautions to be observed when laying track, and also the basic design of the base board. Electrical connections for some of the more common layouts are shown.

Any resemblance of true railway operation is generally avoided by many modellers. This subject is covered along with further listings of various types of rolling and coaching stock which could be used when deciding on what type of operation was to be employed on the layout. What layout would be complete without some form of scenery — there are quite a few clues and useful hints on this rewarding aspect of the hobby. Numerous examples are given of the types and meanings of various signals seen throughout Australia and New Zealand, and some of the likely manufactured signals which could be adapted to local conditions are mentioned. Lineside buildings supplied in kit form are enumerated, also advice on the assembling of rolling stock and loco. kits is given, along with mention of some of the snags that can be encountered.

It is to be expected that some encouragement in scratch building and kit butchery to produce some local prototype would be given, along with examples of suitable subjects.

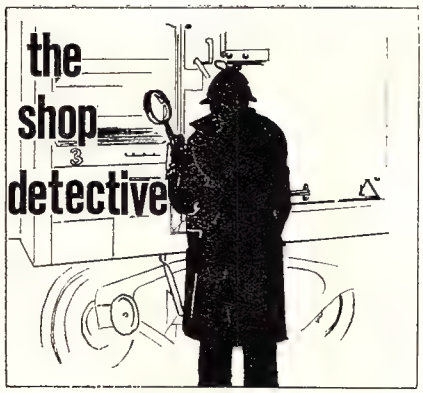
Both N gauge and Garden layouts are discussed in such a manner that you would like to have both if possible. A comprehensive appendix lists all the manufacturers, their products, and their agents or representatives mentioned in the book. A second appendix gives a list of the prominent model railway clubs throughout Australia and New Zealand, and this could be useful when travelling around.

ABOUT THE AUTHORS

The name of Alan Johnston should not need any introduction to anyone who has been following activities in the local model railway scene over recent years. Alan has a wide range of interests and activities which have helped in the preparation of subject matter for this book.

Bill James is a Sydney journalist and author, and with the skill of his profession has helped to make this book readable and interesting for both young and old, amateur and professional.

Summing up; a good book and also a good buy at $4.75.



The range of scratch-building parts for 'O' gauge is rapidly expanding at the 'Dockyard. I was particularly impressed with a 3 axle passenger truck set. Several more unpainted brass locos and freight cars are available.

Probably expanding even more rapidly are the various makes of 'N' gauge equipment. Several more road names in freight equipment were noticed at all the major suppliers, namely Dockyard, Melbourne Sports Depot and Mac Titcher, of Dandenong.

I did hear that Mac was out of the retail part of the game, but a phone call soon put me to rights. Mac will continue to maintain stocks of Floquil, Northeastern, Peco, Shinohara, Central Valley, Rivarossi, Tri-ang, as well as various detailing parts for rollingstock and real estate. Give Mac a ring some time — you'll be glad you did.

To protect your magazines until you are ready to have them permanently bound, I can recommend the magazine binder available from Sands and McDougall, Spencer Street, Melbourne; just across from Latrobe Street. The binder has steel wire ribs to hold the magazine in place, and is very good value at 60 cents. Sands also stock some Airfix kits, and a range of 'Husky' motor cars and such, which look about right for 'HO'.

During the week I called at Alfred Stewart's, corner of Hardware and Little Bourke Streets, Melbourne, to look over their range of 'Bedford' needle and escapement files. Several times I have obtained hard-to-get drills and taps from Stewart's, who also stock a big range of hand tools of use to the serious modeller. Courtesy and intelligent attention to your needs is further stock-in-trade.

Most Coles Stores have a small hand vyce which would be a valuable addition to your tool collection. Excellent for holding small parts for filing and shaping. Recommended at around 50 cents.

I have been looking over the 'letraset' catalogue again, and feel that the small lettering in white and the striping (various colors) would be of use for finishing Australian prototype. However, the price of $1.75 is hardly economical for the individual, but groups or clubs should find this no object. See the full range at Letraset, 447 Collins Street, Melbourne.

Dear Readers,

We've been having an extremely busy time, and there are a great many items of interest coming to a head, with some of them not quite ready to go. In the first place I can tell you that you will see ATLAS HO Structures and N Gauge Locos and Rolling Stock (many of them Rivarossi made) in greater profusion than in the past, and from more retailers. This is for some time in the future.

For N Gauge Fans, Peco have a bright new 1968 programme, and Arnold too have new lines. Of Australian interest "Sentinel" have advised that their 12" radius universal point Right Hand to match last year's Left Hand is now available. They are telling you more about these in a separate advertisement. There will be many new lines in HO/OO and a few in TT-3 and further trackwork in O Gauge.

Much as we'd like to detail all these items and illustrate them for you in this magazine, we realise that that is not possible . . . not till they're photographed and in stock.

We do publish now a monthly Newsletter which is available in distant places by mail (sample copy send 10c), or through your regular hobby dealer in most places. In this and in supporting price lists we are endeavouring to keep modellers up-to-date with latest current and advance information concerning the lines we have the pleasure of distributing in Australasia. We are now publishing lists in two groups: Booklets containing illustrations and current prices of various sections of lines and most of which retail at 5c each; Price List Folders covering various sections of lines—which are on a Give-Away basis. You may ask now for—

Booklet covering all Scenic (Masasco) Lines in stock for HO/OO. First Edition. Price List Folder No. 1—Merten Figures both HO and N Gauge and illustrated as it happens. Just ask your hobby shop for this one. Coming soon—Booklets on N Gauge (2nd Edition) and on Rivarossi — the latter will be an April issue of "Rivarossi News". Price List folders for both.

Check with your hobby dealer and ask for the March "Newsletter" — it has a magenta printed cover.
regular "Rivarossi" dealer.

Moreover, watch for our fuller details in the next issue of A.M.R.M.

"Rivarossi" are doing a special run for us later this year of a Pennsylvania Day Coach. In style it will be similar to the Santa Fe Day Coach No. 2743 but in Pennsyl. livery. It is a one-only run, so first orders in will secure. Price (so far as we know) $6.85 (internally fitted, lit and full scale length). Book now with your regular "Rivarossi" dealer.

Western Civilisation dating from the dawn of Christianity is not 2,000 years old, which is but a fragmentary particle from a chapter in the history of evolution. The Message of Easter brings hope to all Mankind that the principles of Western Civilisation with their attempted care for the ill and the aged, no matter the breed nor the birth, will eventually spread throughout the world, with a fulsomeness unseen today. Easter is our longest Religious Festival and the Easter Message is one of joy and gladness in the years ahead.

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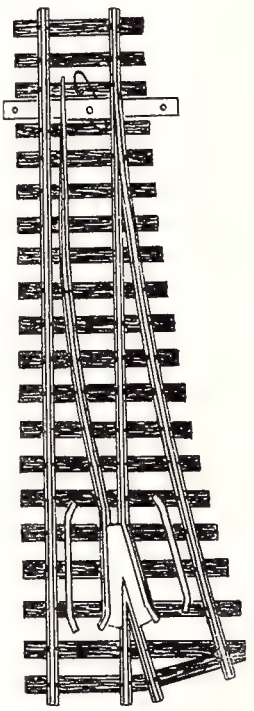

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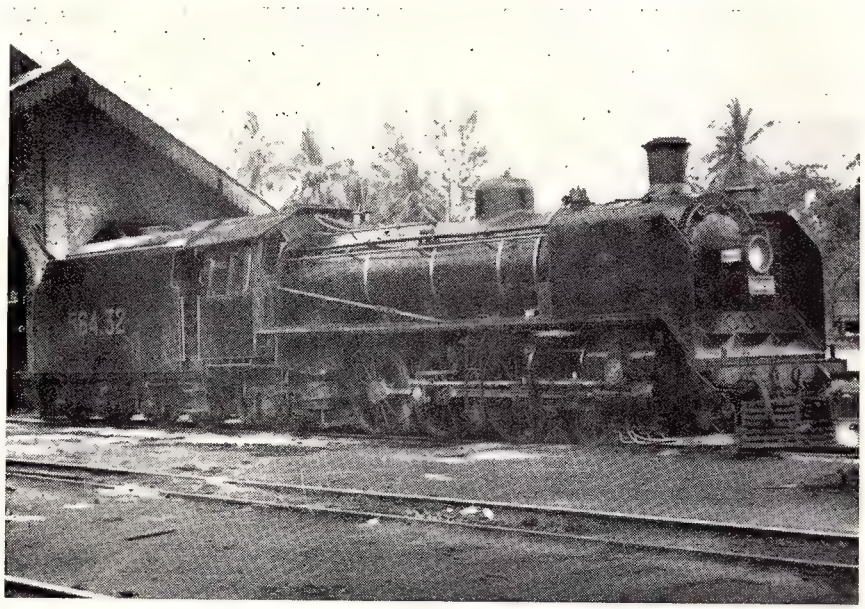
WE VISIT MALAYAN RAILWAYS

By JEFFREY G. BARCLAY



A short three mile 30-cent cab ride from the bustling heart of Singapore itself, stands the local office of the Malayan Railway. Under the station roof and within its grounds, one sees sights not common at home. Where else, for instance, is labour so cheap that the management can afford to have a man hand-picking minute weeds out of the ballast?

Inside the station building, things were cool and quiet, and I took advantage of the relief from the tropical heat outside to orient myself and take in the surroundings. I soon found the station-master and after presenting my credentials, I was shown the utmost courtesy and attention to my every request. There being no such thing as a public relations office where information can readily be found, I was quickly ushered to the office of the District Traffic Superintendent, he being the most senior officer of the railroad in Singapore. He was most helpful, answering many of my questions himself, then ordering that I be given unrestricted "prowling powers" and a guide to boot for as long as I cared to stay.

With my Indian guide, whom I shall call Hassim, in tow, I passed from the entrance hall to the platform area, to find the first item of interest right before me. At the end of the platform tracks were the most modern and efficient bumpers I have ever seen. Built in the U.K. in 1930 by Ransomes and Rapier, they are the hydraulic type, stopping the runaway as it hits the single arm and 'compresses' the fluid inside the cylinder. This device is a vast improvement over the wood and iron ancients in our own "modern" terminals. Two of the metre-gauge (39.37 inches) tracks are used for passenger traffic and have a locomotive runaround track between them, while a third track and platform is for mail and express, also loaded at the main station.

With but 92 passenger trains in and out per week, there is a lot of time to browse over the rest of the area between the arrival and departure of trains. For instance, the 2-color light signals, fully interlocked with the freight yard and engine servicing facilities seem quaint in their small size compared with ours. Everything from the freight and passenger rolling stock, track and signals, to the stature of the people seems diminutive at first glance. With Hassim enjoying the break from loading express parcels, we turned past the elevated interlocking tower to the locomotive servicing area.

Here, I was introduced to the foreman, an avid steam lover, who expounded all he knew of the existing state of the roster. His first love, and I am inclined to agree with him, is the 564 class 4.6.2 Pacific. As soon as I saw their neat, clean and speedy lines, I was attracted to them. As you can see, their general shape is not unlike that of Marklin's 2.6.2. Five classes of Pacifics were built, starting with the 55 class in 1929, then the 561, 562 and 563 classes, all pre-war and now extinct. The 564 class were built post-war and even young as they are (as steam locomotives go) are subsiding in favour of diesels. All these engines were built in Great Britain. Pertinent facts of these high-stepping beauties include a boiler pressure of 250 lbs./sq. in., 54" drivers, rated at 1200 horsepower, tender capacity of 2510 gals. oil, 3430 gals. water, the tender weighs 44 tons 6 cwt. fully loaded and the locomotive weighs 59 tons 10 cwt. (All weights are "long" tons). The locomotives originally coal-fired, but now oil-burning, are easily capable of the 45 m.p.h. speed limit imposed on them when hauling their maximum of between 650 and 750 tons. There are but 40 of these attractive little steamers left, the rest having been scrapped or mothballed.

Only two other classes of locomotives remain on the steam roster, one of which is the 90 class 2.8.2., still called "Macarthur" in this country out of deference to the U.S. who supplied them. These locos, nearly all of which have been sold to Burma and Thailand, had a boiler pressure of 180 lb., the tender carried 1800 gals. of oil, 4168 gals. of water, weighed 48 tons 18 cwt. when fully loaded, and the engine weight is 52½ tons. This type were all Baldwin built and were supplied with Walschaerts valve gear, the only locomotives on the system to be so equipped.

All others (except 41 class, see below) have poppet valves, and they report exceptional success with this type. One is moved to surmise that if the U.S. roads had given modern steam power the chances it's had in the Far East, perhaps steam would still be gracing the rails the world over. Unfortunately, the remaining half dozen or so of the Macarthurs rarely venture as far south as Singapore, and further information was not available.

The remaining type, 40 class 4.6.4 tank, are also no longer to be seen in this centre, but due to a late change of itinerary, was able to see these locomotives at Prai (pronounced "pry"), the mainland railway station for the island of Penang. Although I was able to photograph the 40 class, I again had bad luck with the 90 class Macarthurs, as the one and only of that type stationed there was out on a run when I called, and I was unable to return later, being on a rather tight schedule. There were three classes of 40 types built, the first, 41 class, having Caprotti valve gear. The 42 and 43 classes had poppet valves. Boiler pressure was 250 lbs. for all three classes of 40 type, tender capacity is 1000 gals. oil and 2000 gals. water, and the loaded weight is 74 tons 1 cwt. No further information was available.

The diesel locos I saw were readily identified as being of English origin. The largest, called 20 class on the Malayan Railway, are well-known to modellers in Hornby-Dublo as the Co-Co.; in Singapore, these green, gray and red locos are rated at 1500 h.p. There are 26 of them overall. They are now the mainstay of the motive

power in Malaya and have all the crack passenger name trains such as the "Magic Arrow", "North Star" and "Golden Blowpipe" and the faster freights.

Even so, the 564 class 4.6.2s are putting up a great fight for their crown. The "Daily Mail", which is a mixed passenger and freight express from the capital Kuala Lumpur, is still hauled by one of these plucky Pacifics. Twenty 15 class 0.6.0 coupled diesel switchers rated at 900 h.p. do all the yard switching on the system. Some of the cars had the roughest handling I've ever seen from the drivers of these locos, which appear to have only two speeds — flat out and stop.

The only other class of diesel, which is diesel-hydraulic, and neither popular nor successful (Southern Pacific and D & RGW managements please note) are the light 16 class 0.6.0 coupled switchers, rated at 700 h.p. These locos are given the wharf and docks area to work, perhaps because of their lighter weight. All locos, whether steam or diesel, are fitted with vacuum brakes. Another instance of mixing the old with the new in this country was noticed in the new Timken roller bearing trucks on rolling stock fitted with a strange "hook and link" type coupler, much like the old Hornby O scale clockwork type, which prevents any car from being turned, lest the sequence of hook-link-hook etc. be upset. We followed the bull-session with the foreman by walking over to the freight yards.

On that side of the main leading into the station, were found three 15 class switchers, busily working, making and breaking up trains, and one setting out cars for loading by the coolies. All passenger rolling stock is uniformly painted an attractive chocolate and cream, with silver roofs. Regardless of the type of car, whether 1st, 2nd, 3rd class coach, buffet or sleeper, they're all resplendent in this gay color scheme, which is quite pleasing to the eye when made up into a train. Some of Tri-ang's old-time coaches in these colors are quite close to the older style passenger rolling stock of the Malayan Railway. Locomotives as well as passenger stock carry the tiger emblem of the system.

In the freight yard itself, which consists of one lead track to the docks area, one lead to the station, three tracks for classification, numerous tracks for storage of equipment and spurs to unloading bays and warehouses, stood a good cross-section of the freight cars' styles used on the system. The majority of them were 4-wheelers, in deference to the tight curvature of some lines I guess, but the larger, newer bogie (or 2 truck) type are becoming more prevalent as traffic increases.

The point that caught my attention almost immediately was the ridiculously easy coding system of the cars. Freight cars are lettered and number coded,

as we are accustomed to seeing. For example, a "B" in the number indicates that the car is a "bogie" or a 2 truck car. "T" indicates "tank-car", and an "O" following that tells that the particular car is meant for oil transportation. A covered goods wagon goes under the coding of "CG". As I mentioned, ridiculously simple when compared with some of our Australian systems. The cars themselves were painted all colours, white, yellow, tuscan red, blue and black, without any apparent colour system for the different types of cars.

All kinds of merchandise flow through the yards, carried on 98 freight trains per week. Products vary from timber logs, fresh fruits and other perishables to the incoming oil, rubber, bananas, fish, tapioca and flour. A great deal of the traffic is purely for local needs, but it still provides a very interesting variety of freight car types. Occasionally, a shipment of hump-backed cattle passes through on its way to a ship in the bay.

Trains are dispatcher controlled over three disivions covering the whole system, and trains are numbered Up and Down as in Australia, rather than the East and Westbound of U.S. practice. Understandably, most traffic is inward from Malaya to Singapore, and only 2 trains daily are dispatched from Singapore yards. (This figure does not include trainloads of empties, which travel as extras).

These 2 trains are Up 62 at 7 p.m. to Kuala Lumpur, and Up 64 at 8.30 p.m. to Prai, with perishables. Up 66 at 10.40 p.m. is kept spare should traffic warrant another merchandise train. In comparison, the inward schedule covers 11 trains daily, from the Down 61 at 4.30 a.m. from Prai to Down 503 at 6 p.m.; which is a Singapore Island factory extra, making the rounds of the factories on the island in the manner of a way-freight, doing what switching is necessary and picking up the day's production of goods.

As on the majority of major railroads, crack name passenger trains are given low numbers. For example, the "Southern Cross" (yes, they have one), Night Express 1st and 2nd class from Kuala Lumpur is Down 11, and the Daily Mail (mixed) is Down 7. The 246 mile run to the capital is made in just over 9½ hours, averaging 26.32 m.p.h., which, when the maximum allowable speed of 45 m.p.h. and the 11 intermediate stops are taken into account, isn't as bad as it seems at first glance.

When you're comfortably sleeping in the air-conditioned luxury of your sleeper, time passes very quickly. You go to sleep here and wake up there, in the good tradition of railroading. It's not much different from home — all same-same Sydney Melbourne on the Aurora — that is if you discount the color of your neighbour's skin, the way he dresses and the language he speaks.

From what little I saw, I'd judge the Malayan railway to be all that its posters claim. My only regret was that time would not permit me a little more travel inland to some of the other railroad centres. From the busy diesel switchers in Singapore yards, to the International Express between Prai (Malaya) and Bangkok (Thailand), the system appears to be an efficient, friendly and well-liked transport necessity of the Federation. With $24,000,000 (Malayan) (approximately $Aust. 6,800,000) slated for railroad expenditure on improvements and modernization in the next few years, there should be, as the railway's folders proclaim, "... and in the future, more progress, as the Malayan Railway continues to provide constantly better service for the people of Malaya."

SIMPLE METHODS OF ACHIEVING REALISTIC SCENERY

By IAN G. PETHERICK

In all modelling scales, from the small shelf layout using N scale to the O scale under-the-house, and including even live steam outdoors, the greatest factor in achieving realistic appearance is the scenery.

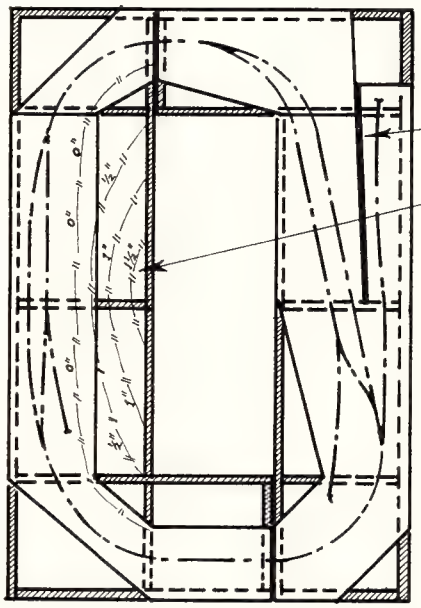

A TYPICAL TRACK PLAN
SUGGESTED FRAMEWORK IS NOT TO SCALE
TRACK SUB-BASE IS DRAWN IN WITH AMPLE SPACE ON EACH SIDE OF TRACKS.
SAWCUT TO ALLOW THIS SPUR TO BE GRADED UP SLIGHTLY BEND BASEBOARD UP SLIGHTLY AND FIX THROUGH SPACER BLOCK – SAY 1/4" IN 20" RUN
ONTO TRACKPLAN SUPERIMPOSE PLAN FOR SCENERY DECIDE ON HILLS, RISES AND WATERWAYS.

FIGURE 1.

The track plan will determine the type of operations and their scope; the scale will decide the amount of detail in the construction; fidelity to era and prototype will go to make the layout believable as a miniature railroad. The scenery is the setting which finally complements the other factors.

To gain the maximum possible advantage from the scenery it must be planned along with the initial track plan and mapping. Only too often layouts progress from the idea through track planning and construction, to operation, leaving scenery "for the present".

The most comman layout shape is a flat board of rectangular plan. It seems the easy way to do it. But look carefully at the next rail yard you see, or at photos, etc., and the first principle of scenicking should be apparent:

Track is rarely flat and scenery is never.

So in starting a small layout on a 6ft. x 4ft. module try to start with the idea that some rise and fall is required in the baseboard. Figure 1 shows a typical track plan. It is not to scale and is meant only to be representative.

For any given trackplan, plan framework according to the scale and likely weights it must withstand. A wide layout at times may require to withstand the weight of a man standing on it. The small layouts merely need to resist knocks and light weights. Onto the trackplan also superimpose contours for the scenery. Slight grades, small hills or mounds and shallow waterways appear in all scenes.

CONSTRUCTION METHODS

To model the near flat ground for "city" areas, plains, riverside wharves, and semi-desert areas a baseboard which is flexible allows for easy distortion and bending to remove the flatness. The soft fibrous wallboard "Caneite" available from timber suppliers and some hardware stores is ideal. It is reasonably cheap, especially bought in 'Natural' sheets. It can be cut readily with medium or coarse toothed saws, by a carpenters' knife, or for rough edges such as sandstone cliffs, simply broken by hand.

For smoothing and shaping a "surform" plane or file, or coarse sandpaper wrapped around a block of wood can be used. The disadvantage of Caneite is its ease of distortion. It requires ample support under trackwork to avoid sagging. A continuous baseboard of hard wallboard, pineboard, plywood or timber planks is the most satisfactory.

Referring to Figure 1, two methods of breaking the flatness are shown. At left the contours show a low hill of gradual slope. This can be modelled by building up the framework and baseboard. For half of the layout it is shown in Figure 2. A sheet of Caneite is then cut to cover this portion of the layout, and a profiled riser is cut and shaped, say from Pineboard, and fixed to the framework. See Figure 3. This riser is cut to be 1¾ in. high at the centre, referring to our original plan and contours, and slopes down each way to zero level (which is the top of the framework). The Caneite is then nailed to the top of the riser, bending slightly as you go. It is then pressed down onto the baseboard and nailed there.

A second method is illustrated in Figure 1 at the right. The spur track can be lifted on a slight grade above the level of the benchwork. About 1 in. in 60 in. is the limit to ensure that cars will not roll down the grade after being spotted. The diagram suggests the flatter grade of ¼in. rise in 20 in. run. Make a saw cut in the Pineboard back to a point 2 in. to 4 in. from the intersection of the tracks and simply lift the spur portion and fix a block of ¼ in. plywood, or several thicknesses of Masonite to support the baseboard. Then cut and nail down Caneite onto both flat and graded portions of the track.

To further add slopes and break up the flatness of the sheets, grade and cut edges as shown in Figure 3 and Figure 5. Either plane away the edge in a gentle slope towards the outside, or build up successive lays of Caneite, sloping them in towards the track. Figure 3 shows alternative slopes. These can be used along the edge changing from a high front edge to a low one to increase interest.

When track is surveyed through undulating land, the surveyor must choose grades and levels such that "cut and

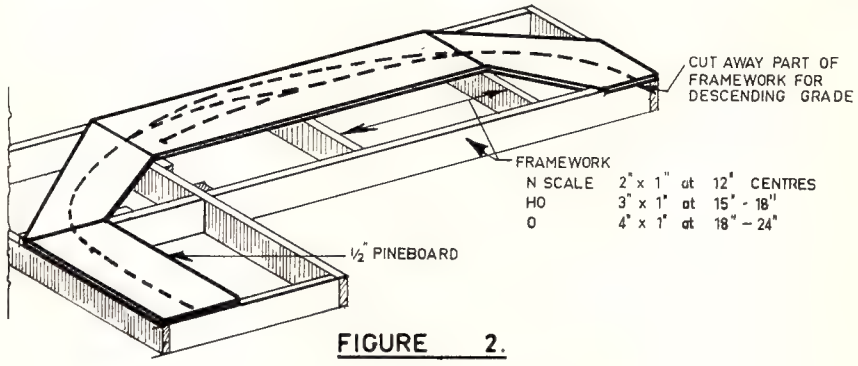

CUT AWAY PART OF FRAMEWORK FOR DESCENDING GRADE
FRAMEWORK
N SCALE 2" x 1" at 12" CENTRES
HO 3" x 1" at 15" - 18"
O 4" x 1" at 18" – 24"
½" PINEBOARD

FIGURE 2.

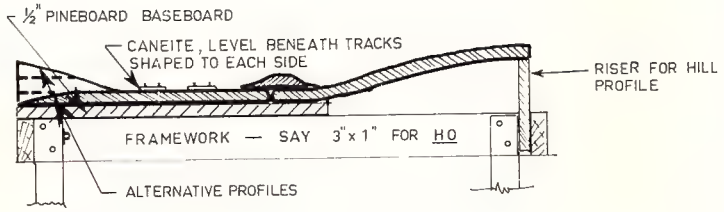


FIGURE 3.

fill" are balanced. Soil removed in a cutting is moved as short a distance as is possible to fill the next depression. On the layout we model this by adding small hills, say one thickness of Caneite high. These should be rounded and shaped into a suitable mound shape and bevelled along the edge where the "cut" has been made. Two mating mounds, one on each side of the track, will enhance the illusion of a cut. This is shown in Figure 4 for a hill of two layers' height (about 1¼in.). A cut can then be made into the Caneite sub-base to create both the depression being modelled and the bevelled side of the "fill". Seal the bevelled edges of both cut and fill and paint on several coats of P.V.A. glue to seal them. While the glue is wet sprinkle on fine sand to give a coarse texture for later painting.

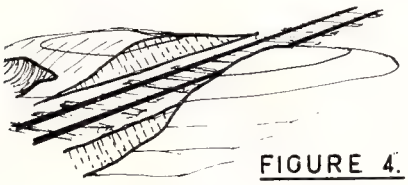


FIGURE 4.

Further character can be added to the layout by adding bushes, grass, weeds and rocks. Figure 6 illustrates one such method. (A) take a length of string; (B) unravel the end into individual fibres; (C) on the layout where vegetation is required place a drop of glue (PVA is excellent); (D) cut a bundle of fibres from the string end about ¼ in. to ½ in. in length and push the cut ends into the glue. They will stand there and after a few minutes can be moved slightly to improve bush shape.

By grouping small and large clumps and by varying the grade of string used, various foliage can be represented. Final colouring will heighten the effect. It is well to remember that most growth occurs in the better watered areas. The hollows, creek beds, sheltered nooks adjacent to cliffs all afford better growth potential, and here we must "plant" most of the bush.

For old-time layouts in particular, and to some extent even modern layouts, there is an easy way out on the subject of trees. As a line was built, vast amounts of timber are consumed in sleepers (ties), trestle bridges, and some improvised stock. An easy modelling detail is to add the tree stumps left all over hillsides and near the line. Allow small twigs and branches to dry out thoroughly and cut them to simulate axe chops, or saw cuts and part break and glue them into suitable holes drilled into the baseboard. Here's another source of shelter for the growth which appears around the stump — weeds, etc.

FINISHING AND COLOURING

The final success of this method depends upon the colouring. Two useful guides are:

Natural colours are flat and not gloss.

Green foliage is always seen with browns and other colours, not alone.

Flat paints are easy to get today. The plastic (PVA) wall paints mix with water and are easy to thin and apply. From artists' suppliers, oil paints may be purchased. These are thinned with mineral turpentine.

Three basic colours will be needed in quantities of a pint or more for 30 sq. ft. of layout; a basic earth colour, dark green (foliage) and lighter green (grass). These can be mixed with smaller amounts of brown, red, yellow, etc., from small tins such as Humbrol or Airfix. In plastic paints the best earth colour I have seen is made only by Taubmans — Cinnamon.

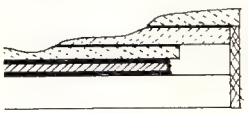


FIGURE 5.

Further colours can be obtained by using powdered pigments. Red ochre, yellow ochre, burnt umber and raw umber being the most useful. They can be purchased from artists' suppliers listed in the Commercial pages of the phone directory. These powdered pigments can be mixed in small quantities into either plastic or oil-based paints getting considerably darker shades for use in simulating dark moist earth, rock shadows, etc.

For a mound which is to be well grassed, roughen the Caneite surface with a steel wire brush, then apply paint in small areas. The paint must be well thinned. It is always possible to add more, but sometimes difficult to remove any. For grass the colour will be mainly dark green for well watered areas, mainly light green for dry areas through lack of water, or due to poisoning besides rail tracks, or through tramping by wheels and feet near footpaths and roads. In both the dry and wet grasses there will be a fair percentage of other shades. Also don't be too careful in covering the Caneite completely. The variations in colour and light reflected from different surfaces helps the appearance.

To paint trackside and ground in yards, etc., the approach is to simullate ground from which most vegetation has been killed by the passing wheels, feet and dropping of ash and cinders; even the deliberate spraying of poison is sometimes carried out. The basic earth colour will predominate; again it must be varied by streaks of darker colour parallel to the rails and lighter "dry" areas in parts to the side of the sleepers. The burnt umber and raw umber provide the correct tones to modify the paints.

No attempt is made to specify quantities in colour mixing. Using the small handle of a teaspoon would lift a large measure of colour for a tablespoon of paint as a rough guide. Much less is sufficient to modify the colours enough to be noticeable.

For rock strata, such as show in the shallow cuttings, colours should be applied in more or less horizontal layers. This represents the alluvial deposits, the sedimentary rocks, which are typical of nearly flat land. Colours may vary quite a deal; yellow ochre alone, and mixed in equal parts with basic earth colour, can be used alternatively with an earth mixed with burnt umber, followed by a thin layer of red oxide to simulate realistic sandstone formations.

Colour can be much more vivid in well-lit scenes than we generally tend to think. A look through coloured travel folders, through National Geographic Magazines, etc., will confirm this. In the model slot car world layouts have been notorious for their glossy bright colours. But apart from the gloss, the range of tones and brightness of colours lends real interest and appeal to a layout.

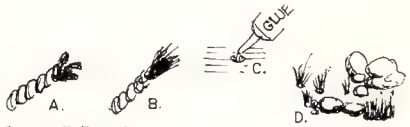


FIGURE 6.

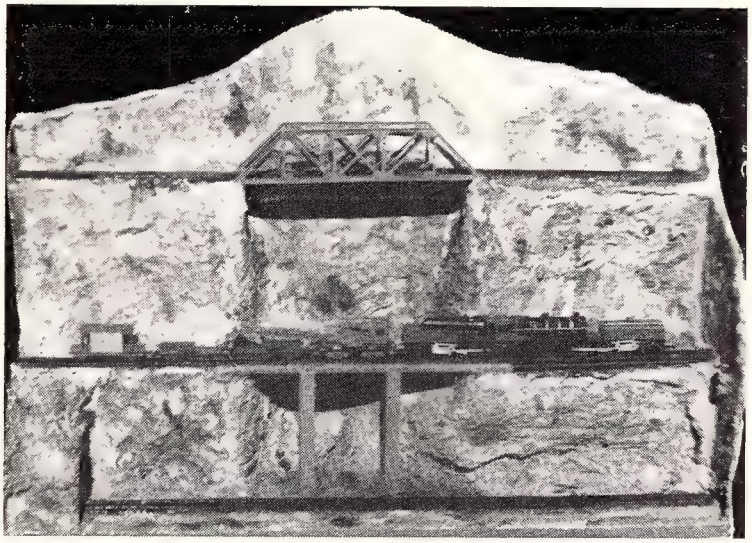
CONCLUSION

The use of Caneite as a track subbase allows easy working. In one piece track, hills, scenic detail, good surface texture and some sound attenuation are all achieved together. The sheets are easily distorted to remove the stark flatness of the sheets as supplied. The method is surprisingly quick; no drying time is needed.

A future article will cover development of the scenery including methods used for steep high hills and rivers and valleys.

A DISPLAY UNIT FOR HO MODELS

By P. F. Kelly



This unit was built to store unpowered plastic Loco kits and other plastic rolling stock during remodelling of my layout.

It consists of three levels of track landscaped as a mountain section with a chasm, spanned by a girder bridge on the high level, and a concrete bridge on the centre level and a 4" tunnel on the left side of the lower level.

The overall dimensions are length 36¼", width 10⅛" and height 25".

Construction consists of a timber base 36"×10"×¾" with ⅛" masonite nailed on the sides and back.

The masonite was shaped to give a curved profile varying from 3" to 10" on the top 15" with the last 10" to the base straight for the sides, while the back was shaped from 19" on the left, rising to 25" near the centre and falling to 21" on the right side of the unit.

The track base is 1½"×½" dressed pine with the front edge chamfered and is supported on 2"×1" dressed pine nailed to the base at 4", 11", 23" and 30" on the centre and high levels. These supports are braced to the rear of the unit by 1½"×½" pine to give the spacings of 8" from the front to the upper level which is 16" from the base. The girder bridge was sloped ¼" to give the effect of a gradient.

The centre track is 3½" from the front and is sloped from 7" to 8" over its length from left to right.

The lower track is 1½" from the front and is laid level.

The track is Peco 3 ft. long and after being laid, was ballasted and then painted with a mixture of black and brown paint of 50/50 mix.

The size of the chasm was determined by the length of the girder bridge and is 11½" wide under this bridge, narrowing to 8" under the concrete bridge.

The concrete bridge is made by supporting the centre track base on 2 pieces which consist of 2"×1" dressed pine painted with a mix of grey and white to give a concrete effect. The track base above this was also painted the same colour.

The support for the scenery is aluminium fly wire which is tacked to the supporter and the top of the back. It is covered with "Spackle" used in a 2:1 mix. The tunnel mouth is mounted 4" from the left on the lower track and flywire covers the space to the side and covered with "Spackle".

The "Spackle" is painted with Yellow Ochre, Raw Umber, Burnt Sienna, Brown and dashes of grey and black, while the girder bridge is light grey. The base is painted grey while the sides and back are painted light blue.

The "Airfix" Garratt is green and black, the crane red, Wellwagon dark green and the guards wagon brown, making a colorful sight against the mountain background.

When the layout is completed, I intend to mount the unit on the wall for permanent display and storage tracks.

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AND THEY CALLED THEM "PIGS"

3622, along with 3663, were the only two of the 75 C.36 class engines not to be refitted with 200 lbs. Belpaire fireboxes. Nevertheless, even before reboilering, the "Pigs" were quite powerful engines, as witness the load behind 3622. Three cars are outside the photo.

Designed by the New South Wales Railways for lengthy relay working of express passenger and mail trains, the 75 members of the class appeared between 1925 and 1928.

The C36 class featured Walschaert's valve gear, superheaters and round-type boilers of 180 lbs. pressure, later replaced by 200 lbs. Belpaire style boilers. Turret tenders were used on the "Pigs" from their inception, this being the first locomotive class in New South Wales to have this type of tender. The class acquired their nickname from the "hogsback" curved appearance of the original boilers.

These locomotives are considered to be the first of the modern N.S.W. steam type engines and, although beset by numerous teething troubles, they have proved themselves to be reliable, efficient machines. The initial 10 came from Eveleigh works, the remainder from the Clyde Engineering Co., of Granville. Numbers 3661 and 3675 inclusive had equalised leading bogies.

The "Pigs" were the top express engines before the advent of the Pacifics, and their lifetime was extended when, all but two, 3622 and 3663, received Belpaire boilers and fireboxes in the early 1950s. Number 3616 was the only locomotive in Australia to be fitted with the Giesl Oblong Ejector equipment, and is to be preserved in working order.

by PAUL ROGERS & HOWARD G. ARMSTRONG

During their lifetime the class hauled the major expresses, amongst these being the Brisbane and Melbourne Limited Expresses, the Broken Hill Express, the Newcastle Inter-City, and Commercial Limited expresses, numerous secondary passenger and mail trains, and have appeared on a few rail fan tours. They are a very popular class of engine, and will long be remembered for their sterling service, which they gave to this State.

Once appearing in the standard passenger livery of green, they have all been draped in black in recent times. Two, 3608 and 3609, named "Hunter" and "Hawkesbury", respectively, were rostered for some time on the Newcastle services. "Hawkesbury" is at present being restored by enthusiasts, in co-operation with the Department of Railways.

Displaced from passenger working, they were found to be good mixed traffic workers, being equally at home on fast freights, or assisting other engines on goods trains, including Beyer-Garratts. Increasing dieselization has limited their extent of operation, and by late 1967, less than a dozen were still in regular service.

More photos on page 16.

N.S.W.G.R. C36 CLASS

Technical Details

Wheel arrangement: 4-6-0 with 8-wheeled (two 4-wheel bogies) "turret" type tenders.

Cylinders: Two outside.

Size: 23" x 26".

Valve Gear: Walschaerts.

Front Bogie Wheels: 2' 9" dia.

Drivers: 5' 9" dia.

Tender wheels: 3' 1" dia.

Boiler Pressure:
- (a) 180 lbs. p.s.i. (original)
- (b) 200 lbs. p.s.i. (today).

Tractive Effort (85% boiler pressure):
- (a) 30,500 lbs.
- (b) 34,000 lbs.

Weight: Loco & Tender (in steam)
- (a) 159 tons, 1 cwt.
- (b) 160 tons, 3 cwt.

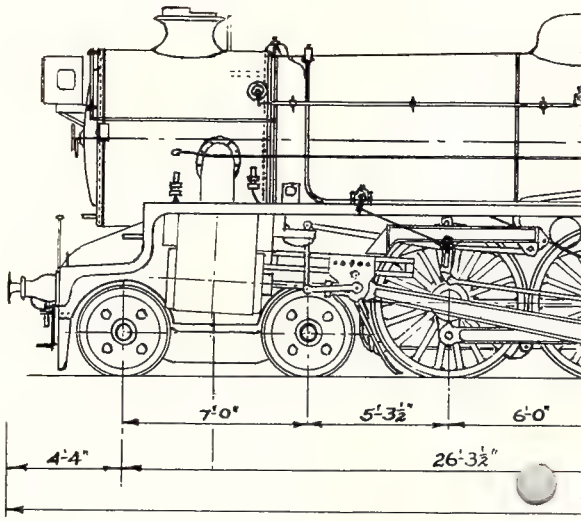
Grate area: 30.5 sq. ft.

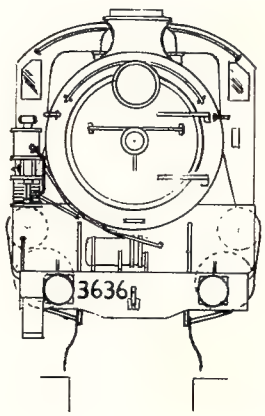
Boiler Heating Surfaces:
- Tubes and Flues — 1800 sq. ft.
- Arch Tubes — 12 sq. ft.
- Superheaters — 650 sq. ft.

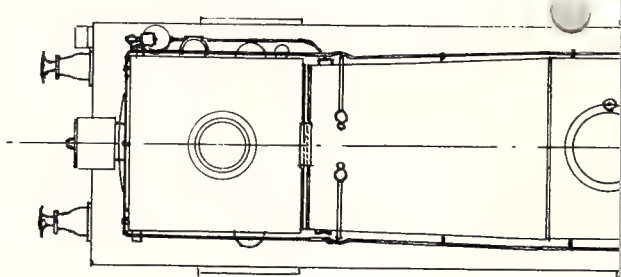
Built: 1925 - 1928.
- Eveleigh Workshops: 3601-3610.
- Clyde Engineering: 3611-3675.

Nos. in Service (Aug., 1967):
- 3607, 3617, 3637, 3659.
- Plus seven units at Broadmeadow.

Preserved Locos:
- 3609 green, "Hawkesbury" (static condition).
- 3616 black (working order).







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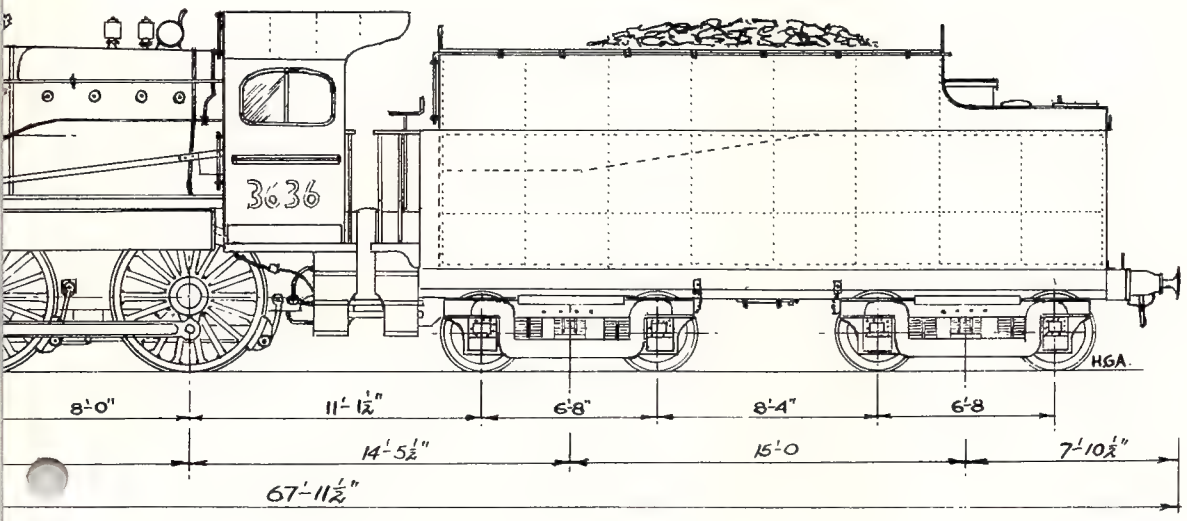
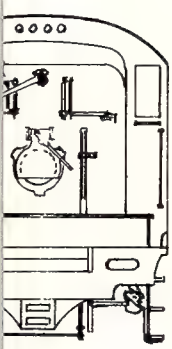
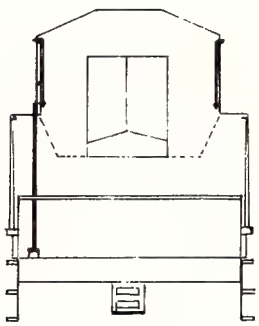
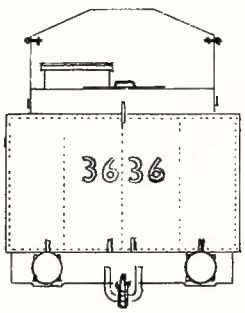
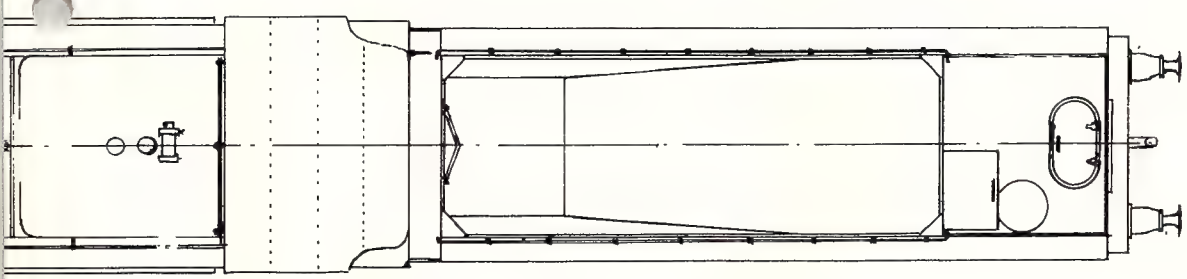










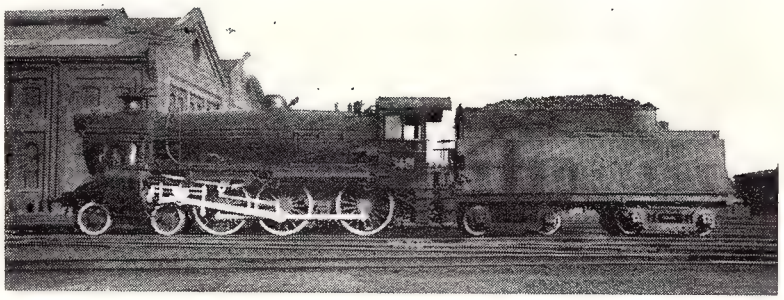
V.G.R. C-36 CLASS

Plan by
H.G. ARMSTRONG
YASS N.S.W.

Aug 67

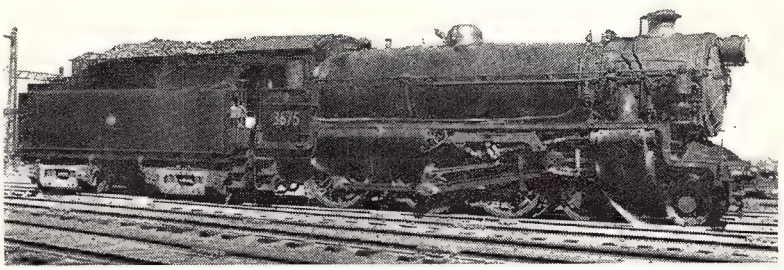
AND THEY CALLED THEM "PIGS"
(Cont.)

The photos in this article are official railway photographs. Readers may obtain copies from the Publicity Officer, NSWGR, 19 York Street, Sydney.



Left-hand view of the class leader, showing the original condition of the C.36 class. As built they were plagued with teething troubles, but after reboilering and cab rebuilding, they developed into the fine machines that we know today.

Right-hand view of the last of the class, 3675, as originally built. The humped boiler, so prominent in this picture, was one of the reasons that the class earned the nickname of "Pigs".



N.S.W.G.R. ALUMINIUM WHEAT WAGONS

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The 150 wagons ordered have cost $1,700,000. The wagons are fitted with roller bearing axles for express train speeds.

The special features of these aluminium-body wheat wagons with faster loading and unloading give a quicker turn around and better utilisation of rollingstock.

The new aluminium wheat wagons now being used by the N.S.W.G.R. have been of great assistance in the haulage of wheat over the last two seasons. The use of aluminium on the body of the wagon gives the highest payload to tare weight ratio of any vehicle of this type.

The new wagons carry an extra 15 tons of wheat — with a payload of 56 tons and tare weight of 15 tons 11 cwt. The former wheat hoppers have a tare weight of 21 tons with a carrying capacity of 41 tons.

Other News from "THE DOCKYARD"

P.R.R., Spruce Falls Paper Mills, P. & L.E. (N.Y.C.), U.P. and Undecorated.

Sekisui have also delivered a limited stock of Controllers, fitted with Rheostat and Reverse Switch, for connection to 12V. D.C. supply at $7.00 ea. The long awaited Fujiyama HO 5-car Passenger Set is now in stock. Also more United HO P.R.R. 'L-1' Mikado.

New in the range of Balboa Scale Models, Katsumi have now delivered the HO S.P. 'Mk-5' Mikado at $80.00, along with the HO U.P. 'MK-1' 'Master Series' Mikado at $97.30.

About the time that this appears in print, Tenshodo are scheduled to deliver more Baldwin 2-6-0T Locos at $19.20, G.N. 4-8-4 'S-1' Loco at $123.50, Rock Island 0-8-0 Switcher at $72.50, 'F-9' Diesel Power Truck Set with Motor at $15.50 per set, along with Switch machines and many other accessory items in the catalogued range. Also due then is our first stock of P.F.M. HO Scale Vernier Caliper at $21.50.

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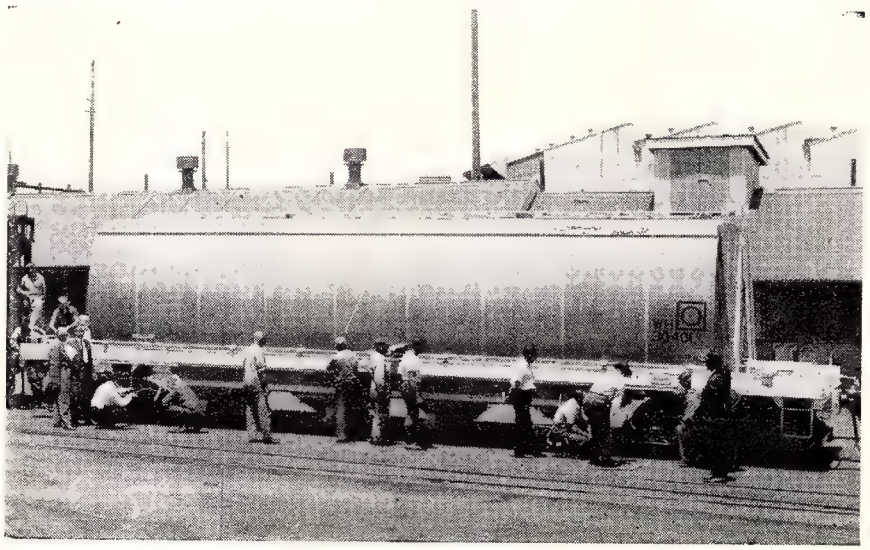

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Double-unit 75 ft. bogie wagons transporting two Flexi-Vans were introduced by the Department on the Sydney-Melbourne service in June, 1962, and on the Brisbane run in December, 1964.

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A VINTAGE ALCO

By Paul Rogers and William Tyers

Success of diesel-electric traction in the United States and Canada caused the New South Wales Government Railways to invest in twenty 1600hp. Alco hood units of 111½ tons weight, in 1951 and 1952. These were the first Alcos in use on the system, and were the forerunners of the hundreds now in operation. Built by the Canadian associate of Alco, the Montreal Locomotive Works, the units were placed in traffic between November 1951, and April 1952. They were of the standard North American 1600hp. hood switcher design, and were equipped with General Electric electrical equipment.

When delivered they were allocated road numbers 4001 to 4020 and appeared in a striking green livery, with chrome yellow lining. An additional six were planned, but were not delivered, but in 1954 a contract with Goninan's of Newcastle for six cab type 1600hp. bodies to be used with six sets of Alco bogies and G.E. equipment, resulted in half-a-dozen hybrids in 1956 (Possibly the Alco-G.E. upset in the States in 1953 had something to do with this occurrence).

Upon their introduction they could frequently be seen in pairs, particularly on express freights on the main Southern line, as a brace of Alcos were rated for the same load as a D.57 or D.58 4-8-2, with suitable assistance on certain sections.

The green livery gave way to Tuscan red in later years, and by the 1960's all 20 locomotives are painted this colour.

The Hobbytown Alco diesel presents a likeable resemblance to the "40" class, although it is designed for right-hand running. However, it is the closest model commercially available to represent the N.S.W. prototype, so a few modifications are in order. Firstly the windows in the cab section above the hoods have to be filled, possibly an alternative to the paste-board we used would be plastic sheeting. If properly fitted there is hardly a joint noticeable when the unit is painted. Secondly the handrails need slight alteration; the necessary modifications can be seen by referring to the prototype photograph.

A necessity for the local version is the installation of buffers, although at the hostler end, many units have received drawbar plates in lieu of the buffers. When the New South Wales engines were first built they had screw-couplings, later replaced by knuckle couplers, as represented by the Kadee Magnematics. Modellers may prefer other couplers, e.g. the X2f; these can be fitted also if desired. It is necessary to insulate the couplers if you intend operating more than one of these units together on a train.

Several other minor details can be added, and there you are, your own "vintage Alco".

Whilst it is realised that this method of conversion doesn't bring an exact scale replica of the N.S.W.G.R. unit into existence in HO form, it demonstrates that there are many items available on the market which can be modified sufficiently to resemble the local scene.

THE MODEL DEPOT Mail Order Service

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Stock car — 9 roads	$3.10
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Caboose — 15 roads	$3.10
Heinz pickle car	$3.10
3 dome tank car — 5 oil brands	$3.10
Heavy duty flat car — 4 roads	$2.85
50' double door auto box car — 8 roads	$3.10
40' flat car with load: Boat, Plane, Auto	$3.10
Pulpwood car — 2 roads	$2.30
50' autoloader	$6.10
Chemical tank car — 9 brands	$3.10
Refrigerator car — 4 brands — 6 roads	$3.65
200-ton crane	$6.10
50' gondola — 3 roads	$2.60
Passenger cars: standard, streamline Baggage-mail, coach, Pullman, observation	$4.55

Road names: Santa Fe; N.H.; B.O.

HO ATHEARN diesel locos:

F-7A cabin streamliner; pass./freight—14 roads—gear drive	$19.75
GP-9 all purpose hood unit-gear drive — 8 roads	$14.65
GP-30 low hood — 3 roads	$18.29
Electro motive SDP-40 pass. low hood — 6 color schemes	$22.80
EMD DD-40 6000 h.p., 16 wheel drive, twin motors single motor price n.a.	$38.00
Hustler industrial switcher, belt drive	$7.55

CENTRAL VALLEY high quality car kits; wood style:

Box Car, Refrigerator, Ventilator Car	ea.	$6.50
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CENTRAL VALLEY trucks:

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6 whl. pass. — Rivetted; Cast	ea.	$4.35
ATHEARN Bettendorf		$1.45

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Peco streamline track-length		$1.10
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Joiners SL-310	pkt.	38c
Insulating joiners SL-311 (as for N scale)	pkt.	33c

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THE DIESEL ELECTRIC LOCOMOTIVE

by "Loco"

The Diesel Motor warrants a brief explanation as to its operation before a description of the Diesel Electric Locomotive is attempted.

In a petrol motor the fuel is burned inside the cylinders and power is developed through the ignition of inflammable vapour by means of a spark, so producing a rapid expansion which drives the piston. In the Diesel the degree of heat needed to ignite the fuel is produced by compression of air by the piston itself.

The air is compressed to about 650-850 lbs/square inch and the effect of this compression is to raise the temperature of the air very rapidly up to 1500-1800 degrees Farenheit. Just before the end of the compression, fuel oil is injected by an injection pump into the cylinder in the form of a fine spray at a pressure of about 5000 lbs./sq. inch, and the high temperature of the compressed air causes it to ignite immediately.

Resultant combustion increases the pressure in the cylinder to between 850 and 1000 lbs./sq. inch, forcing the piston downwards and thus producing power.

There are valves, worked off a camshaft, which open and close the cylinder ports at exactly the right moments in the cycle of induction, compression, power and exhaust. To cool the engine the cylinders are encased in water jackets, the heat of which is dissipated in a radiator. This is done by pumping the water through a cooling system in which its temperature is kept down by means of air drawn in by large rotary fans. A considerable quantity of lubricating oil is carried and is kept in circulation through the engine and cooled. Finally, to protect the cylinder liners and the pistons from undue wear, filters must be provided for the air, the fuel, and the lubricating oil, to keep them as pure as possible.

Starting the diesel electric motor is effected by means of a large battery, connected to the generator which operates as a motor to start the diesel.

Diesels are either 2-stroke or 4-stroke, the first firing every second stroke and the latter every fourth stroke.

Locomotives utilise a number of cylinders from 3 to 16.

The Diesel Electric Locomotive (see diagram) uses the diesel to drive the main generator, also an auxiliary generator (not shown). This latter provides current for lighting, controls and for charging the batteries. The blowers (for cooling) and air compressor for brakes may be driven by the diesel or auxiliary motors. The main generator supplies Direct Current (D.C.) to the traction motors which are hung on the axles of the bogies. This power is transmitted in a graduated manner by means of the driver's control lever, which is moved through a series of notches. On main line diesels the motored axles are mounted on bogies and when all axles are motor driven, the entire weight of the locomotive is available for adhesion, so the diesel is able to exert to the full its high tractive effort.

In later articles I will describe the Diesel Mechanical Locomotive and the Diesel Hydraulic Locomotive.

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UME/MLE Flatcar KIT $1.65

EXTRA !

GRC KIT AVAILABLE APRIL

These are really first class kits and make up into excellent models of the prototype. Buffers, ladders brake gear, couplers, and bogies are not included. Add postage 10 cents for each kit.

Sole Distributors for N.S.W.:

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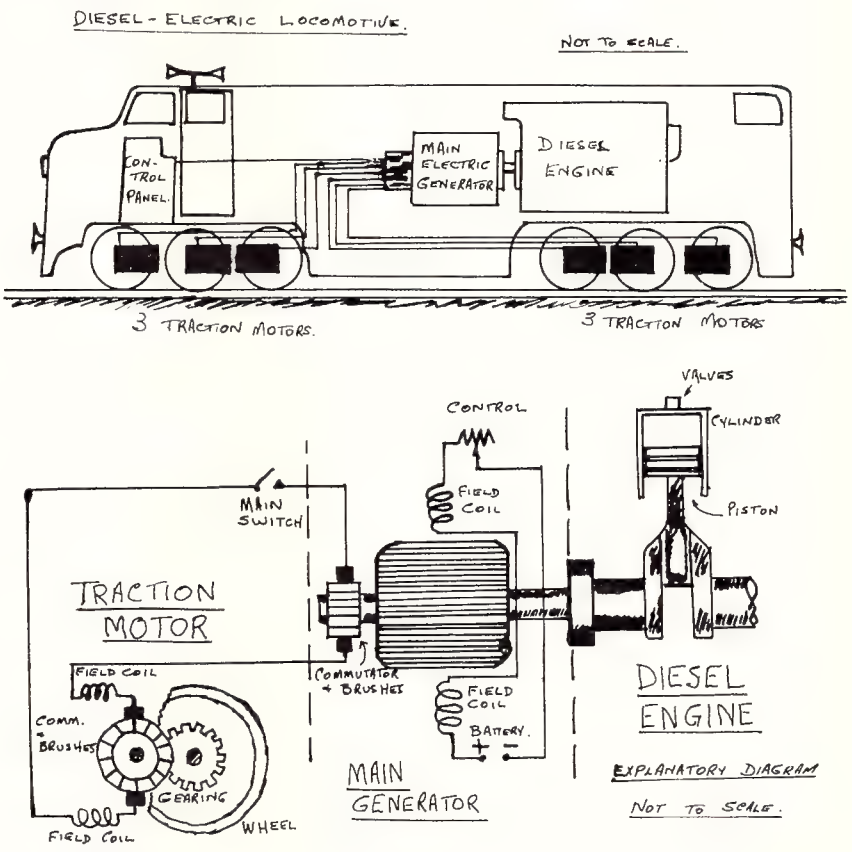


REVIEW IN BRIEF

FILM STRIP

NSWGR 57 & 58 CLASS LOCOS IN ACTION. Distributed by N.S.W. Rail Transport Museum, Box 1983, G.P.O., Sydney, NSW, 2001.

Twenty-two excellent colour transparencies including notes on the engines and the individual photos are available. The Museum points out that even if the "mountains" were still running one couldn't photograph them for the price of $3.00 posted.

THE RAILWAYS OF TASMANIA

On account of the size of the operations of the railway system in Tasmania — approximately one-fifth of the Victorian railways — the whole of the system has been covered in this article. It is anticipated that future reference will be made to the Emu Bay Railway, and the recently closed Mt. Lyell Railway, which used the Abt system of traction. The information for this article was supplied by the Public Relations Office of the Tasmanian Transport Department (Railways Branch).

The Railway history of Tasmania commenced in February, 1871, when a line, constructed and managed by the Launceston and Western Railway Company, was opened for traffic between Launceston and Deloraine. Launceston — in the North of the State — is Tasmania's second city, and Deloraine is a township 45 miles West of Launceston. This line was acquired by the Government in 1873 and the gauge, originally 5' 3", was reduced to 3' 6" in 1888. In subsequent years the line has been extended from Deloraine to Stanley and Smithton in the far North-West of Tasmania.

The rail link between Hobart, the capital city, and Launceston was constructed and managed by the Tasmanian Main Line Railway Company, and was opened for traffic in November, 1876. The Company operated until October, 1890, when its interests were purchased by the Government.

Details of Main and Branch Lines in operation over recent years are set out below:

MAIN LINE — HOBART TO LAUNCESTON — 133 MILES

Principal Stations and Junctions:

Derwent Park (4¾ miles from Hobart): Branch Line runs to works of Electrolytic Zinc Company of Australasia at Risdon, and other industrial undertakings.

Claremont (8¾ miles): Branch Line to factory of Cadbury-Fry-Pascall Pty. Ltd. End of double track section from Hobart.

Bridgewater (13½ miles): Derwent Valley Branch Line runs from Bridgewater to Maydena (55¼ miles) serving Australian Newsprint Mills at Boyer, and extensive areas producing hops, small fruit, etc., and National Park (47¾ miles) with its famous Russell Falls is a popular tourist resort.

Campania (27½ miles) and Colebrook (39 miles): in this section there are some heavy grades and sharp curves which impose restrictions on loads and speeds of trains. Six miles north of Colebrook is a tunnel three-quarters of a mile long.

Parattah (55 miles): The main line reaches its highest point (1460 ft. above sea level), at Stonor, near Parattah.

Antill Ponds (68 miles) and **Tunbridge** (74 miles): Road and rail run close together in this locality, and there are some of the best sheep properties of Tasmania in this area.

Ross (83¼ miles) and **Campbell Town** (90¾ miles): Near Ross is the famous Mona Vale House. These are the centres of large pastoral estates, with the Elizabeth River at Campbell Town and Macquarie River at Ross.

Conara (98 miles): The Fingal Branch Line runs from Conara to St. Mary's (46¾ miles) and serves the coal mining areas.

Western Junction (121¾ miles): Transfer point for Main Line passengers travelling to the North West Coast. There is a large marshalling yard for goods traffic, and transfer is effected direct from Western Junction aerodrome, to station, of air-rail freight.

Launceston (134 miles): Terminal for Main and Western Lines. Launceston is the main centre of Railway operations. From Launceston the North-Eastern Branch Line runs to Lilydale (21 miles), Scottsdale (47 miles) and Herrick (84¾ miles).

WESTERN LINE — LAUNCESTON TO SMITHTON 178½ MILES

Principal Stations and Junctions:

Longford (17¾ miles): The iron Railway Bridge at Longford, 400 ft. long was brought from England in 1871, it has since been strengthened to take heavier loads.

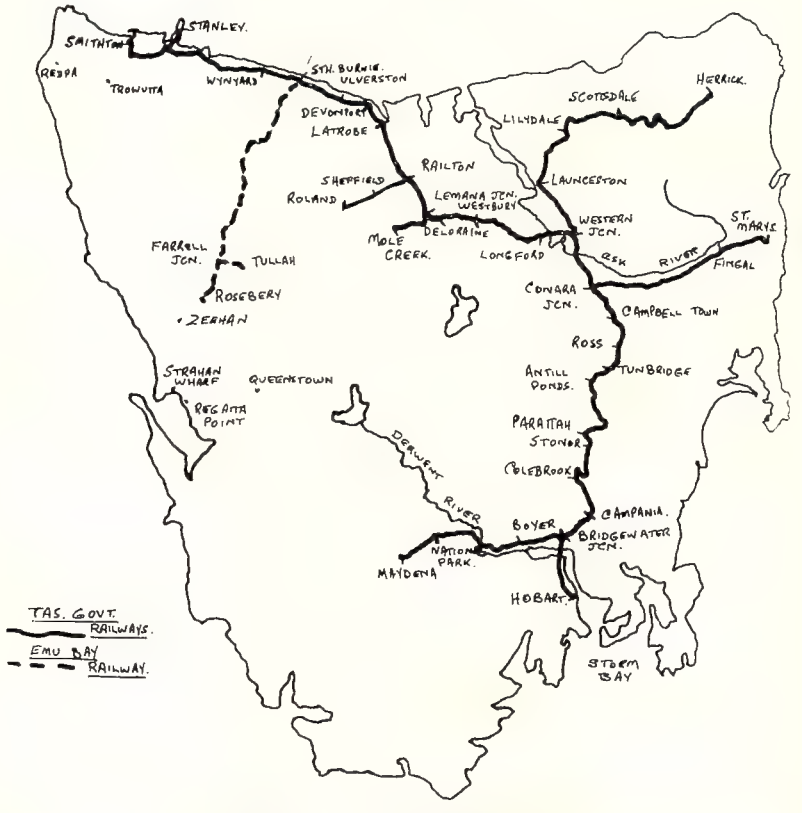
Westbury (35 miles) and Deloraine (45 miles): Rich agricultural country and fine scenic surroundings, are features of this locality. The railway crosses the picturesque Meander River at Deloraine.

Lemana Junction (48 miles): There is a branch line from Lemana Junction to Mole Creek (12½ miles) open for goods traffic.

Railton Junction (67 miles): The Goliath Portland Cement Works are located at Railton, and are served by a spur line. A branch line runs from Railton to Sheffield (8¼ miles) and Roland (14 miles).

Latrobe (75 miles): The line crosses the Mersey Bridge and runs through some fine orcharding country.

Devonport (82¼ miles): This seaport, noted for its rich agricultural country, is one of the largest townships in Tasmania.



Ulverstone (93¾ miles): A popular resort for tourists, Ulverstone has some fine beaches and sporting facilities.

Burnie (112½ miles): The largest town on the North West Coast and main seaport. Headquarters of Associated Pulp and Paper Mills Ltd. From Burnie the Emu Bay Railway Company's line runs to Rosebery (76 miles).

Wynyard (124¼ miles): A prosperous farming district producing large quantities of butter and cream.

Stanley (167½ miles): A township and port at the foot of a striking eminence known as the "Nut". From Stanley there was a branch line to Trowutta (26½ miles), connecting the agricultural districts with the port.

Smithton (178½ miles): An important agricultural and dairying centre which is growing rapidly. A branch line known as the Marrawah Tram runs from Smithton to Redpa (25½ miles).

ZEEHAN — STRAHAN LINE

Until recently the Tasmanian Government Railways operated a service between Zeehan and Regatta Point on the West Coast of Tasmania, over a distance of 29¼ miles. This service connected with the Emu Bay Railway Company's line between Zeehan and Burnie, and the Mount Lyell Company's line between Regatta Point and Queentown (21½ miles). Although these lines were operated by three different interests, the gauge was 3' 6" throughout, and rollingstock interchangeable.

THE "TASMAN LIMITED" PASSENGER SERVICE

A passenger service of the highest quality is provided by the "Tasman Limited" which operates daily in each direction (see Railway Map) between Hobart (South); Launceston (North); and Wynyard (North West). The "Tasman Limited" consists of twin articulated saloon coaches with a Cafeteria Section. Specially trained hostesses are in attendance.

The underframes and bogies of the cars are of all-welded construction made up of steel plates and sections. Special attention has been paid to the design of the bogies so that maximum riding comfort will be provided for the passengers. Rubber auxiliary bearing springs and rubber pads under centre pivots and side bearers insulate the carriages from road shocks, and, together with long-type laminated side bearing springs over the axle boxes, give the bogies excellent riding qualities. Shock absorbers are fitted to control the side and vertical movement of the swing bolsters. Rubber has also been used extensively in the draw and buffing gear.

The framework of the bodies is of light-steel welded construction and the exterior panels are of 16 ga. planished steel plate spot welded to the framing. The interiors are lined with flush panels with a selected Queensland maple veneer finish. Special fireproof Tropal insulation fills the spaces between the outer panels and inside lining. The floor is also suitably insulated. This complete insulation assists in keeping the interior of the car reasonably cool in summer and warm in winter.

To ensure that the condition of the air inside the car is kept fresh and at a comfortable temperature, free from dust and without objectionable draughts, Stone's pressure ventilating and heating equipment has been installed. This equipment consists essentially of fans delivering fresh filtered air through insulated ducts to outlets under the seats. A heating unit in the ducting enables the air to be heated in cold weather and this heating is thermostatically controlled so that the interior of the car can be kept at a determined temperature. The pressure ventilating of the carriage permits the use of wide type fixed windows with small sliding vents above. This type of window gives the passenger a wide range of vision, and at the same time exterior noises are reduced to a minimum.

The lighting for the car consists of continuous fluorescent tubes down the centre of the car with separate fluorescent lights in the toilets and vestibules.

Special attention has been paid to the selection of the most suitable type of seat for the "Tasman Limited". The Heywood-Wakefield seat, developed originally in America, but now manufactured under licence in Australia was selected. This seat, which has head rests, arm rests, and foot rests, is of the reclining type and can be rotated in pairs so that passengers can always face the direction of travel. The seat has been scientifically designed to assure relaxed full length support and has been made with a full range of positions to suit the traveller's needs. The spacing of the seats has been arranged so that there is ample leg room. To add further to the comfort of the passengers, carpets with sponge rubber underlay and curtains have been fitted.

Full meals are provided from the cafeteria from which passengers may also purchase light refreshments.

MAIL CHANGING EQUIPMENT ON THE "TASMAN LIMITED"

The handling of mails on the "Tasman Limited" is carried out automatically while the train is in motion. The equipment which enables this to be done was first introduced in Australia by the Tasmanian Railways.

A movable arm is fitted in the doorway of the van. This arm is normally in a vertical position, but may be swung out from the side of the van into a horizontal position to pick up and/or drop mail bags as required. The arm has two extending parts, one prong-shaped, for picking up mail bags, and the other with a bracket to hold the bag to be dropped. Adjacent to the stations at which mail exchanging is to be effected, are two posts with arms similar to the prong-shaped arm and bag carrying arm in the van equipment. The exchange of the mail bags is effected by the prong-shaped arm spearing a large ring on the mail bag; this ring being held in specially designed clips on the bag carrying arm. The dropping and picking up of mail bags can be carried out simultaneously. The equipment has been designed to exchange mail bags up to 25 lbs. in weight with the train travelling at a speed of 20 m.p.h. Mail exchanging equipments of various designs have been used for many years on railways throughout the world. The prong-shaped arm used on the Tasmanian Government Railways equipment is similar to that used on American Railways, but the remainder of this equipment has been designed and developed by Tasmanian Government engineers.

DIESEL-ELECTRIC TRACTION

The principal method of traction is by diesel electric locomotives. Basic advantages of diesel electric operation in Tasmania are greater tractive effort for a given axle load; more economic usage of fuel; the handling of longer and heavier trains; lower maintenance costs and elimination of delays associated in steam trains, with the taking of water and cleaning of ash pans. It has been possible to increase the ton miles of goods hauled without a corresponding increase in staff. In addition to the train line diesels which are now used exclusively, the diesel shunting engines have proved more efficient than steam.

FREIGHT DEVELOPMENTS

The Railways are constantly on the lookout for more traffic and employ special commercial representatives whose duties are not only to attract new busi-

THE RAILWAYS OF TASMANIA
(Cont.)

ness but to secure greater recognition by business and industrial undertakings of the efficient transport facilities which the railways provide. These include:

- Mechanical handling equipment at main stations.
- Container and Pallet loading facilities.
- Electric hoist gantries at principal goods stations.
- Fork lift truck handling and small elevator type trucks for the handling of palletised goods.

Large quantities of cement used in connection with the State's big Hydro-Electric development is being successfully handled by the use of pallets. In addition the system provides facilities for point to point movement of heavy machinery, earth moving equipment, bridge material and fabricated steel work; also door-to-door movement of household furniture.

A recent development in the field of heavy transport is the drive-on, drive-off method of transporting new motor vehicles. Flat top rail wagons are used and plank "bridges" are fitted between wagons so that vehicles can be driven on or off under their own power. Special ramps have been built to facilitate loading. In addition to the new motor vehicles this method is also extensively used for transporting tractors and other farm machinery.

The bulk handling of superphosphate is now an established practice. This is carried in specially constructed steel containers of 2½ tons capacity. Other commodities in the heavy haulage category include firewood, pulpwood, timber, fuel oils, coal and minerals. Some 300,000 tons of locally produced coal is transported each year from the mines on the East Coast to points of consumption. At the larger mines this coal is mechanically loaded from large capacity bins into railway trucks and in the case of big industries is again mechanically unloaded at its destination.

In contrast to the handling of heavy goods and materials the railway business in the carriage of parcels and packages is considerable. Special attention is given to the handling of fragile and perishable commodities, and express delivery which ensures speedy delivery of this class of freight is a particular feature.

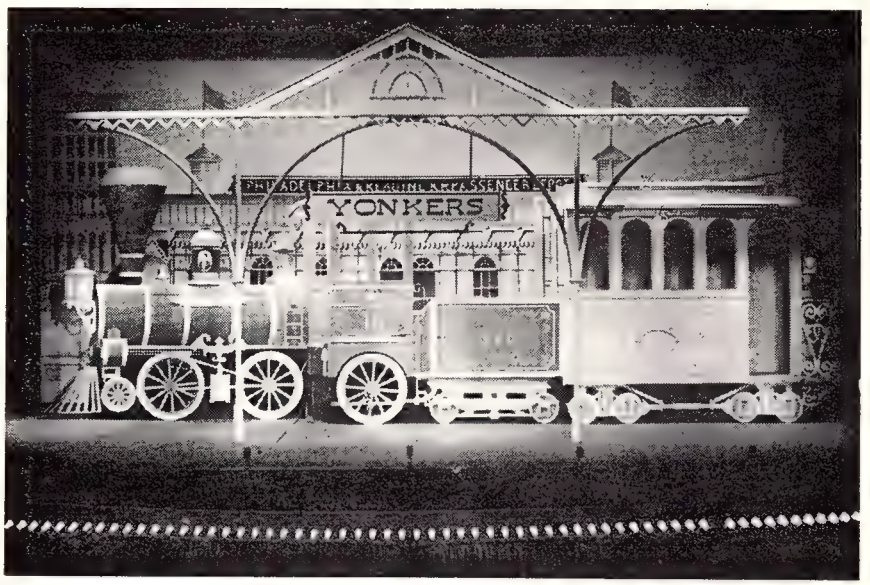
In the specialised field the railways are equipped with refrigerated and insulated vans for the carriage of foodstuffs and other perishables and there is also special rollingstock for the carriage of such bulk cargoes as oils and petroleum products, sulphuric acid, fertilizers and livestock.

Container traffic between Tasmania and the mainland has helped the railway system to pick up on business recently. The bulk of this traffic is transferred at Devonport to the "Princess of Tasmania", with the remainder being loaded at Burnie.

FOR A SENTIMENTAL JOURNEY ONLY

3503 (left) and 3509 pass at Wingello, N.S.W., with two sections of an Australian Railway Historical Society Tour in 1964.

MUSICAL COMEDY



Theatre-goers amongst our readers will no doubt recognise this scene. Photographed at Her Majesty's Theatre, Sydney, a couple of years ago by Ivan Ive, this is the "train" that the hero Cornelius Hackl and his friend Barnaby Tucker board to travel from Yonkers to New York in the wake of their storekeeper boss, Horace Vandergelder. Beautifully mocked up in plywood and suitably lettered for the New York Central Railroad and with wheels that turned as it moved off the stage it was a spectacular scene as the orchestra played and the loco bell chimed to the accompaniment of the singing of the passengers.

IT'S NOT TOO LATE TO

"SEE SYDNEY IN '68"

The S.C.M.R.A. is holding a Model Railway Convention during Easter — 12th to 14th April, 1968, in Sydney. All who are interested in model railways are invited to attend.

For $10.00, plus $16.00 hotel accommodation per person for two (2) nights, if required, you will have a week-end of model railway interest. The programme features Club visits, Clinics, a special Rail Tour, a Convention Dinner and a series of competitions aimed to interest everyone.

The competitions will be open to all and will be held in the following categories:

1.	CONSTRUCTION:	A — Locomotives, Steam B — Locomotives, Diesel C — Rollingstock, Passenger D — Rollingstock, Freight E — Structures
2.	PHOTOGRAPHY OF MODEL RAILWAY ITEMS:	A — Black and White B — Colour Slides
3.	OPERATION:	Test your skill with our shunting problem
4.	ENGINEERING:	A test of loco drawbar pull and efficiency. Try your best performing loco against that of others.

A brief description of the planned programme is as follows:

Friday, 12th April—

Morning: Registration of guests and competition models at the Australia Hotel.

Afternoon: Tour of various large Club layouts.

Evening: Clinics and Competitions at Menzies Hotel.

Saturday, 13th April—

Morning: South Pacific Electric Railway for a Barbecue lunch and inspection of Tramway Museum.

Evening: Inspection of Competition models and Convention Dinner.

Sunday, 14th April—

Train tour with mid-morning departure and returning in time for all evening overnight trains.

For further information, please send a stamped addressed envelope to:

Mr. R. Tonkin, 7 Park Avenue, OATLEY, N.S.W. 2223

"WHAT IS AVAILABLE IN N SCALE?"

By Paul Van Leuven

There is still some confusion between OOO and N. The difference lies in the scales, yet the track is very much the same in both cases. OOO, originated and used in England, is based on 2m.m. to 1 foot scale or 152:1 in proportion but runs on 9m.m. track, which is undersize proportionally. Only the 2m.m. Association in England adhere to the correct track gauge of 9.4m.m. for 2m.m. scale.

N originated in Germany, standardised, throughout Europe, and now accepted worldwide, is based on 1.9m.m. or .075" to 1 foot scale with a proportion of 160:1. The track gauge of 9m.m. for this scale is in correct proportion.

Therefore, all models (not track work) made in England are based on 2m.m. scale, while the rest of the world use the 1.9m.m. scale.

It was called N gauge because the track gauge is 9 m.m. wide and because in all languages the word "nine" starts with an N, the N.M.R.A. lately suggested to call it N scale rather than N gauge, as there could be confusion with the 'N' meaning "narrow" gauge. Therefore I will refer to it as such.

At present N scale has more to offer than TT ever had and by the end of 1968 would equal the variety of equipment one can obtain in HO.

The scale normally provides more railway in less space, when following HO practice, but tends to give a toy-like effect due to the fact that the onlooker tends to take in the whole of an N scale layout at a glance. By careful track planning and making use of large curves, avoiding too many straight track lines, and more scenic details, one can obtain an impressive layout that is more prototype-like.

This of course would not be of the small size, but could be made of reasonable size when following some tips I will outline in the future in this magazine.

Some earlier productions were poor and left off a lot of detail. But since the American interest became demanding the quality of later productions improved more rapidly than was ever accomplished in model railroading.

The range of equipment is quite large to suit one's pocket. Some makes are of course better than others, and also dearer. It is a pity not much on N has been published before and so I will list what is available at the present.

I will mention Peco, well known to us, who make good 9m.m. flexible track and track accessories, also produce wheel sets and very good wagon and loco bodies of British prototype to fit over Arnold Rapido chassis.

W. & H. also make loco bodies of British prototype in soft metal castings to fit over Arnold Rapido chassis. British Trix make some British type coaches but this is based on N scale rather than OOO and thus slightly undersize. Wrenn import Lima products, and also have British products of their own, and as these are based on N scale also, there is quite a confusion in England as to what 2m.m. scale really covers.

All the above N scale makes, after July 1967, adopted the Arnold type coupler as standard equipment except Piko which has their own chopper type coupler, Sekisui, Japanese prototypes, which are fitted with an X2F coupler, and Lima which can either be obtained with Arnold or Lima type coupler.

The Con-Cor and Sekisui models have the smallest flange of all N models and could even run over code 40 rail.

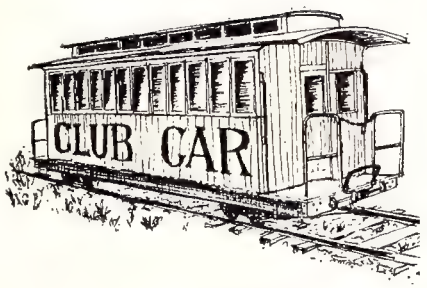
Most hobby shops stock some N scale but all equipment mentioned above is available from Austral Modelcraft, 101 Laura Street, Ekibin, Queensland 4121, and those interested could get a complete price list for the asking. The potential of N scale is clearly shown in the new book "Building and Operating Model Railways" by Alan Johnston and Bill James available from bookstores at $4.75.

N SCALE AVAILABLE IN AUSTRALIA

Trade Name	*Where Manufactured*	*Type of Models*	*Quality & Detail*	*Loco Performance*	*Track & Accessories*	*Coupler Type*	REMARKS
PIKO	E. Germany	European	fair	fair	not available here	chopper type	No quantity available; no spare parts.
LIMA	Italy	European, British & U.S.	good	fair	drawn steel rails	Arnold or Lima type	Reasonably priced; quantity available with new additions to come.
ARNOLD RAPIDO	W. Germany	European & U.S.	good	very good	good appearance tinplate rail	Arnold	Largest range of items including buildings, road vehicles, accessories and spares. Quantity available here with new additions continuing to arrive.
MINITRIX	W. Germany	European & U.S.	good	very good	nickel silver rail; some available here	Arnold	Locomotives are very well engineered and smooth running. Electric locomotives have pantograph pick up also. Quantity available with new additions continuing to arrive.
ATLAS (U.S.A.)	Rivarossi (Italy) Pola (Austria)	U.S. type only	very good	very good	nickel silver; not available here	Arnold	Passenger cars and locomotives made by Rivarossi are exact replicas of their HO counterparts. Freight cars, made in Austria, have a big range of types and road names. Items are cheaper than Arnold.
CON-COR (U.S.A.)	Sekisui (Japan)	U.S. type only	very good	very good	—	Arnold	Big range but not the same type of freight cars as Atlas. Wheel standards are the best of all N makes; finer details, too.
SEKISUI	Japan	Japanese type only	very good	good	not available here	X2F	Same as for Con-Cor, but produce Japanese prototype models only.

N SCALE NOT YET AVAILABLE IN AUSTRALIA

TIBIDABO	Italy	Italian	good	good	Casadio type	Lima type	Obtainable soon.
CASADIO	Italy	—	—	—	good	—	Well known track maker now producing 9m.m. gauge.
FLEISCHMANN	W. Germany	U.S. & Germany	not known	loco perf. not known	not known	Arnold	Started to manufacture this year.
REVELL (U.S.A.)	W. Germany	U.S. type	good	not known	—	Arnold	Made by Arnold specially for Revell; called Revell Rapido.
AURORA (U.S.A.)	W. Germany	U.S. type	good	not known	—	Arnold	Made by Minitrix specially for Aurora; called Postal Stamp Trains.
NOT YET NAMED	Japan	U.S. type	super	not known	—	—	Brass hand built scale models made by a famous HO maker in Japan. Prices are only slightly less than HO models.



To Club Officers: These pages are available for the dissemination of news about your societies. Brief news about activities will be welcome for these pages. Closing date is fifteenth of month prior to month of issue

S.C.M.R.A. ACTIVITIES

Eastern Division Notes

Meetings will be held at the following members' homes:

May 11th — Rodney Tonkin, 7 Park Avenue, Oatley.

June 13th — Brian Fowler, 11 Pearce Street, Baulkham Hills.

July 14th — Ian Mountjoy, 6 Dumaresque Street, Gordon.

OTHER CLUBS

ALBURY LITTLE TRAIN ENTHUSIASTS' CLUB

A new group formed in Albury for H.O. modellers. At present meetings are held every alternate Sunday at various members' homes. A permanent layout is being planned. For further information contact:

Warren Wormald,
C/- 1098 Mate Street,
NORTH ALBURY, N.S.W. 2640.

FLINDERS MODEL RAILWAY SOCIETY. Secretary: Keith A. Nelson, 580 Blackburn Road, Mt. Waverley, Vic. 3149.

February 3rd was our first anniversary, and we celebrated with our annual business meeting. For such a solemn occasion, the meeting was well attended.

The Society's officers presented their reports, which showed continued progress in our aims. Scratchbuilding had been introduced and a great deal of interest shown, as was evident by the number of entries in our competitions. As has been clearly announced, further classes and competitions are being organised for 1968.

Laurie Jackson's resignation as Secretary was accepted by the meeting and Keith Nelson agreed to take over the post.

When the business meeting was finished Stuart Barker gave us a short talk on electrical symbols which gave us a better insight into these mysterious looking signs.

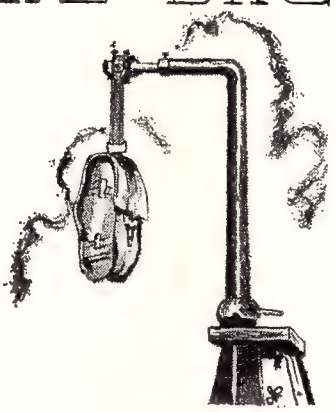
The competition was won by Tom Weickhardt with a model of a V.R. section shed and accessories.

Saturday, 6th April, 1968: Chas. Huggard, 65 Farview St., Glenroy.

Saturday, 4th May, 1968: Jim Blaney, 21 Alvie Rd., Mt. Waverley, Competition — Passenger Car.

Saturday, 1st June, 1968: Keith Nelson, 580 Blackburn Rd., Mt. Waverley.

MAIL BAG



COVER PHOTO

Sir,

Regarding your photograph on the front cover of the Jan./Feb. issue of the A.M.R.M., I think the two truck Shay on the front cover is one of the 6 (?) that ran between Newnes and Newnes Junction betwen the beginning of the century and about 1926 when the mine closed down.

These locomotives used New South Wales Government Railways stock and were replaced by a standard goods loco at Newnes Junction.

They were the only 4'8½" Shays in Australia and could still be seen rusting away in the ghost town of Newnes as late as 1965. DENNIS MITCHELL.
Glenbrook, N.S.W.

Sir,

The photo on the front of the previous issue of your magazine could have been taken at Powelltown, timber country north of Melbourne.

The only Shay locomotives in Victoria were operated on this line.

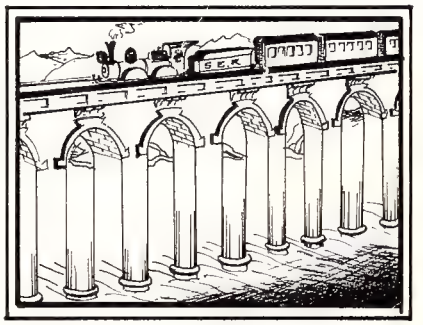
MAC TITCHER.
Dandenong, Vic.

REQUEST FOR PLANS

Sir,

I have had sent to me the accompanying sketch by a friend. As I find difficulty in drawing up suitable plans for scratchbuilding, I ask whether any of your readers can help?

F. IVE WHEELER.
Indooroopilly, Q.



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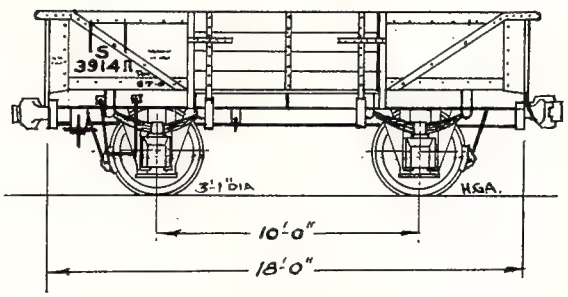
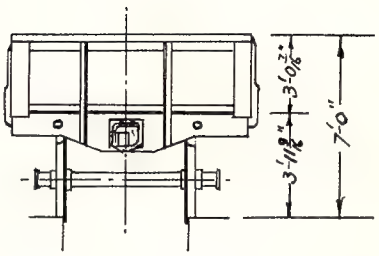
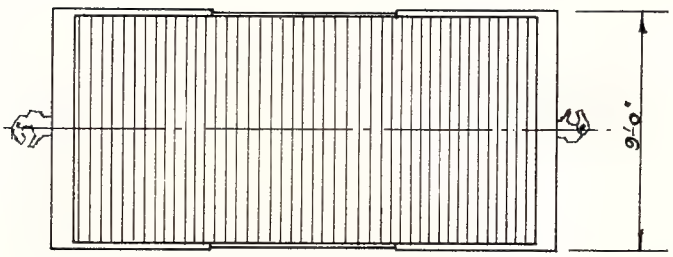
OUR PLAN

Probably, until the advent of fast freights using exclusively bogied stock, the S Wagon was the vehicle most widely used on the N.S.W. system. All those who model N.S.W. Railways should have a few of these wagons on their layouts.

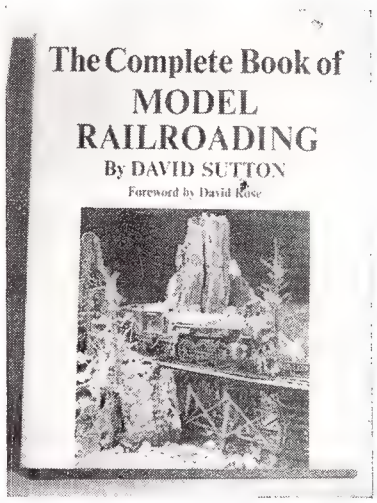






N.S.W.G.R.
15 TON OPEN WAGGON
CODE: S

Drawn	H.G.A.
Date	AUG 65
Scale 3·5mm = 1 foot	No G3



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Every model railroad fan — both beginner and seasoned veteran will find this big book a richly rewarding guide, a treasure chest filled to the brim with practical ideas and know-how, steeped in the finest traditions of railroading lore and Americana.

It describes all major phases of model railroading — in detail — and represents the most complete, up-to-date guide yet published in the model railroading field.

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He describes the different types of equipment available; how to build your own models; how to further authenticate the appearance of your locomotive through the addition of details; the whys and wherefores of maintenance to keep them running in top condition; and the secrets of painting and aging techniques to give your model a more prototype look.

The book covers the planning of a model railroad, from layout design and track plans, to scenery and mountain building, special effects and type of equipment to use.

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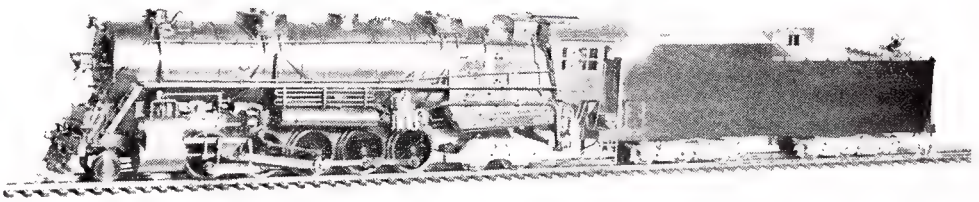
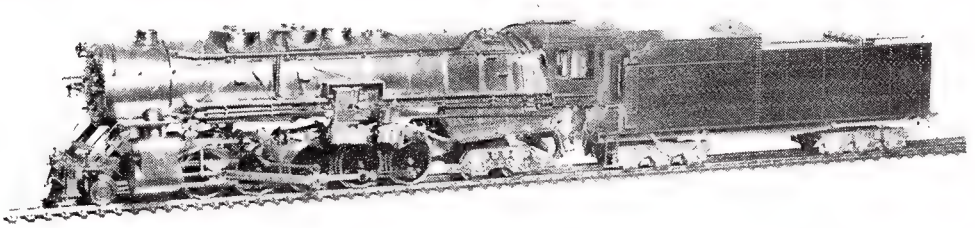
NEW & REPEAT RUNS IN HO — OUTSHOPPED BY KUMATA . . . . .



D.M. & I.R. 2-10-4:
Built to the order of L.M.B. Models. Equipped with fully-sprung mainframe and enclosed gear box High capacity, welded type Tender mounted on 6-wheel Buckeye trucks. Tender fitted with "dog house" and back-up light. Weight, 2lb. 2oz. Length, 14¾ in. **Price: $91.00.**



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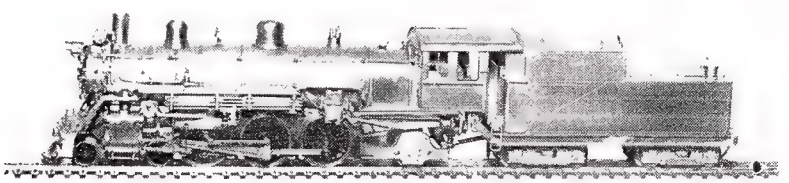

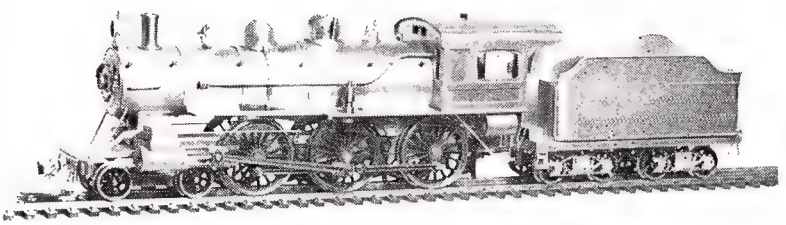

L.S. & M.S. 4-6-0:
Produced many times in the past and a sell-out with each run! This sleek Ten Wheeler is available once more for the modeller who wishes to obtain a medium traffic, quality brass locomotive at the keenest possible price. Weight, 1lb. Length, 9¼ in. **Price: $47.00.**

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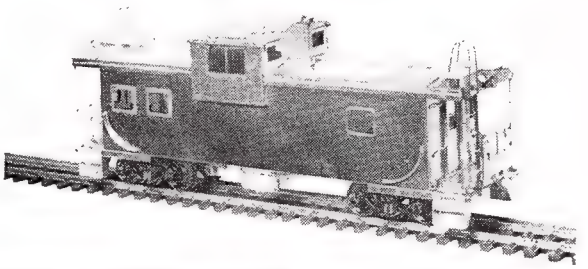

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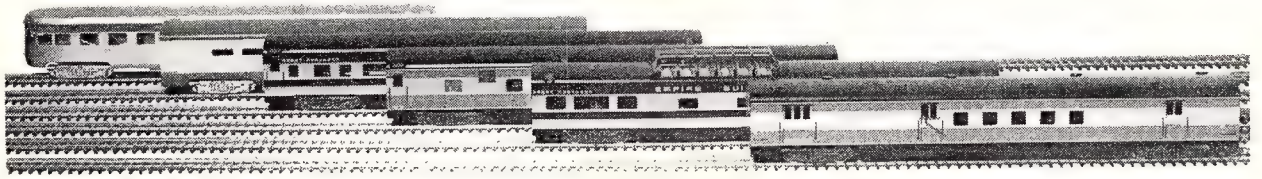

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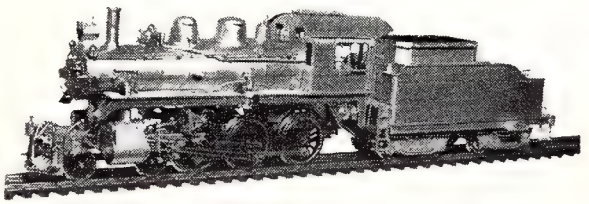
C.P.R. 4-6-0:

A further superb Locomotive from Olympia! In addition to a striking appearance in honed lacquered brass, the "D4G" Ten Wheeler offers such features as operating headlight, detailed back boiler plate in cab interior, fully enclosed gear box, brakeshoes and sprung frame. Weight, 12oz. Length, 8½in. **Price: $61.00.**



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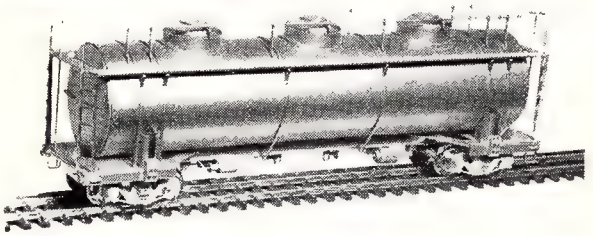

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(No. 6 dual gauge turnouts will come next!)

Other News from "THE DOCKYARD" . . .

Always a popular wheel arrangement, one of the finest HO Consolidation locomotives we have yet had the pleasure to examine has just arrived from Tenshodo. The new G.N. 'F-8' in a limited run of 'Glacier Park' livery at $109.80. The same works have also supplied the G.N. 'S-1' 4-8-4 at $123.50, R.I. 0-8-0 Switcher at $72.50, 0-6-OT Baldwin Loco. at $16.00 and 2-6-OT Baldwin Loco. at $19.20. More Tenshodo Switch Machine, Key Switch for Switch Machine and 'F-9' Diesel Power Truck Set, with Motor, are also available. Remaining in stock are a few 'F-9' G.N. A & B Units at $60.00 per pair, GP-35's in S.F., U.P., G.N. and Burlington liveries at $53.00. Still some U.P. "Big Boy" at $250.00 also . . . the long awaited P.F.M. HO scale Vernier Caliper is now available at $21.50 . . . A treat for narrow gaugers! 'United' will soon deliver further stocks of the HOn3 Sumpter Valley 2-6-6-2 articulated logging Loco . . . From Olympia, further stocks of the N. & W. 'J' Class 4-8-4, factory painted and lettered, are just to hand at a reduced price of $129.50. See our Nov./Dec. ad. for an illustration of this fine Locomotive. At the same price, we expect to be able to offer the C. & O. 'J3a' Class 4-8-4 'Greenbriar', factory painted and lettered, stocks of which are now in production . . . By the time this appears in print, Kumata will have delivered a number of new HO models comprising: P.R.R. 0-6-0 'B6sb' Switcher at $54.36, D. & R.G.W. 2-8-0 'C-48' Consolidation at $67.55, B. & O. '1-5' Class Wood Caboose Body at $13.55, Boston '6000' Class Trolley at $40.75 and a matching Trailer Car, with trolley poles at $33.95. For HOn3 gaugers, something modern in the form of a fine little D. & R.G.W. Diesel Switcher, a 4-wheel pattern with outside frames at $30.00. For O gaugers, Katsumi have recently delivered the S.P. Bay Window Caboose (less trucks) at $29.25, also more 6 and 8 wheel Buckeye and 8 wheel Commonwealth Trucks, as per our O Gauge Price List. Our next new O gauge Locomotive will be the N.K.P. 2-8-4 Berkshire at $275.60. In HO, the same factory have just delivered the Balboa S.P. 2-8-2 'MK-5' Loco. & Tender at $80.00, as well as Balboa's magnificent U.P. 2-8-2 'MK-6' Master Series Loco. & Tender at $97.30 . . . In N scale, SEKISUI recently delivered the 50' Welded-side, panel door Box Car at $2.75. Heralds are Soo Line, P.R.R., Spruce Falls Paper Mills, P. & L.E. (N.Y.C.), U.P. and Undecorated. By the time these notes are out, the new 40' Wood Reefer will be available in all heralds, as well as Undecorated. In addition, we will have the re-run of the 40' AAR Box Car. Both the latter models also being priced at $2.75 ea. . . . Coming next are 85' Smooth Sided Streamlined Passenger Cars, comprising Coach, Dome Car, RPO/Baggage and Observation, in S.P. 'Daylight', S.F. and G.N. heralds at $3.30 ea.

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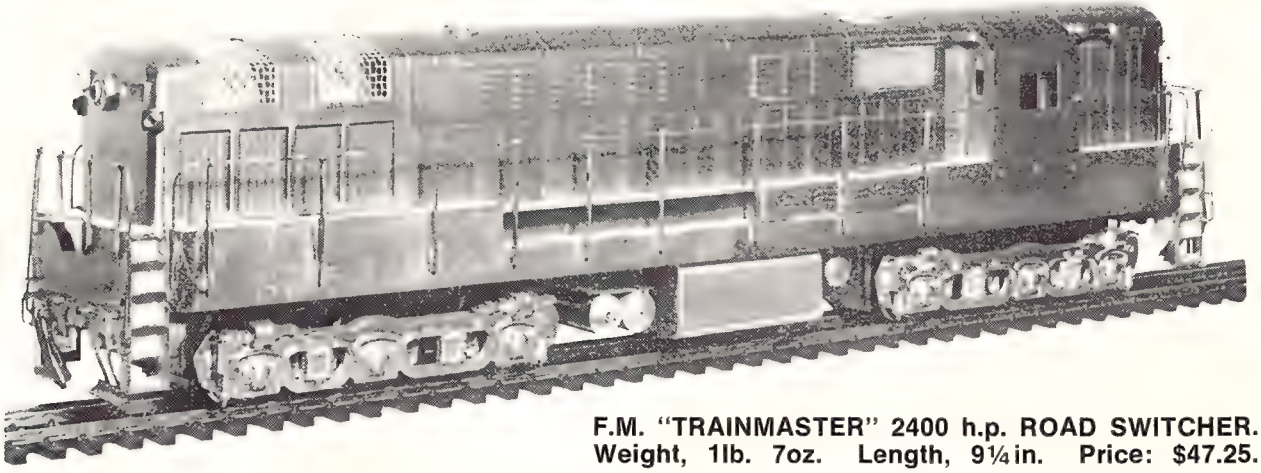
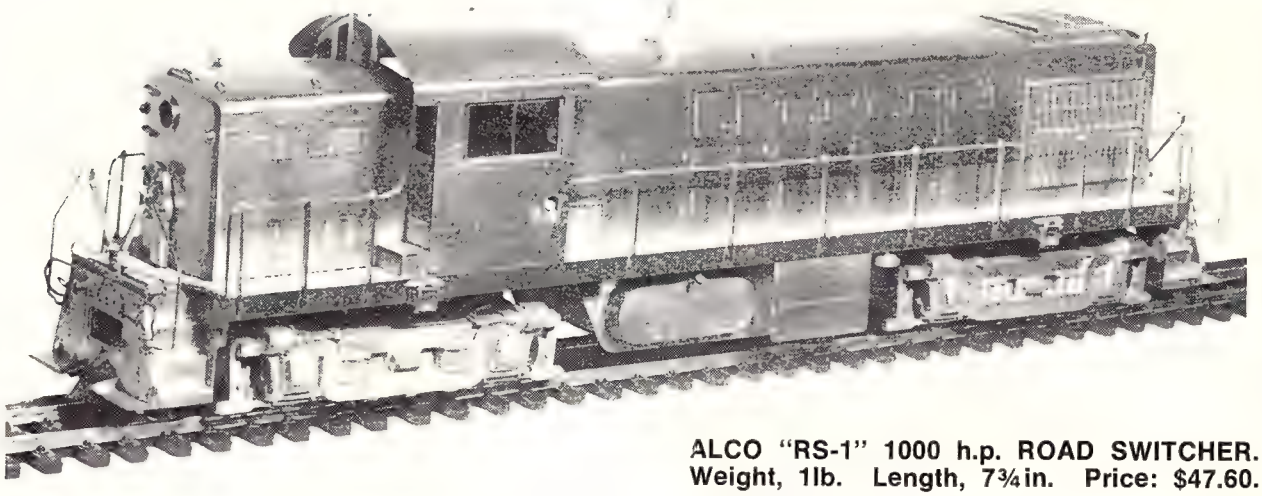


F.M. "TRAINMASTER" 2400 h.p. ROAD SWITCHER. Weight, 1lb. 7oz. Length, 9¼in. Price: $47.25.

In presenting modellers with a growing range of modern motive power, Kumata have established new and exacting standards in the manufacture of diesel locomotives. Self-contained, individually motorised trucks have been developed for the big Alco-G.E. "U-50" and EMD "E-9" A and B Units, whilst such models as the Alco "DL-640", EMD "SW-1500" and EMD "RS-1325" Locomotives are equipped with enclosed, axle-hung gear boxes, connected by universal couplings and powered by heavy five-pole motors driving through double reduction gears. Superstructures of matching quality come with double-etched finish. All running plate is chequer surfaced and radiator and register openings come fitted with fine mesh screens. Lost wax castings are standard and all locomotives are supplied with a honed, lacquered finish.



ALCO "RS-1" 1000 h.p. ROAD SWITCHER. Weight, 1lb. Length, 7¾in. Price: $47.60.

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The Australasian **MODEL RAILROAD** Magazine May/June. 1968 Volume 3 Number 32

The Official Journal of NMRA in Australasia; incorporating the YARDMASTER, The Bulletin of the Sydney Model Railway Society

ARTICLES

8 **VICTOR HARBOUR, by Robert C. Perkins.**
A South Australian station ideal for modelling.

10 **DYNON—MELBOURNE'S MIGHTY FREIGHT TERMINAL.**
An interesting trip around the new yard.

12 **NATIONAL CONVENTION, AUCKLAND.**
The Editor reports on his recent trip to New Zealand.

16 **A QUIET NIGHT AT WINGROVE, by Jack McLean.**
Our popular author creates a problem for his guests.

17 **SCMRA EASTERN DIVISION EASTER CONVENTION.**
The story of the recent convention in Sydney.

18 **PLANNING IN N SCALE, by Paul Van Leuven.**
The master in this scale offers some suggestions.

22 **OBERON.**
Another prototype station plan.

REGULAR FEATURES

6 Editorial.

6 On the Cover.

6 Shop Detective.

12 Armchair Review

23 Mail Bag.

24 Club Car.

25 Yardmaster.

26 Market Place.

27 Our Plan.

EDITOR J. T. St. Leger Moss
ART DEPARTMENT Howard G. Armstrong, Norman Coughlan, Ivan W. Ive
PRODUCTION DEPARTMENT Peter R. Woolley
COPY DEPARTMENT Fay M. Brown
CIRCULATION & SUBSCRIPTION Terence N. Carpenter

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Editorial

What about the woman at home? Is she a railway widow? Does the cook know how the guard spends his money and time? Maybe, in this age of greater understanding of technical matters by the fairer sex, it is about time that they took a more active part in the organisation and running of the railway layout.

Yes, there will be some fellows who will say that they don't want their hobby invaded, but on the other hand, if the ladies were given the opportunity to participate then it most likely would be easier to spend a few extra dollars or hours on the layout. If you need a starting point for the place of a woman in your railway empire, then why not start a Train Catering Service? Alternately the average woman could no doubt take an active part in making up some kits to get the feel and practice necessary to make that final effort to get the layout completed.

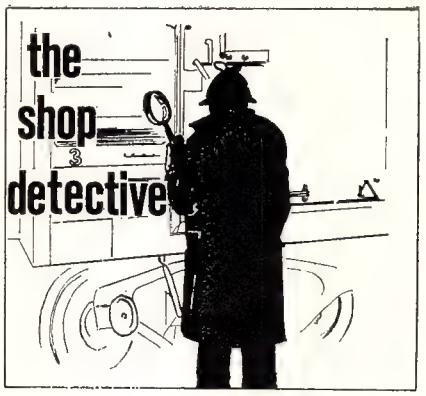
Whilst it is not the intention of the editor to turn this publication into a lonely widow's column, it would be interesting to hear the views and ideas of some of those wives and sweethearts already assisting in the efficient running and organisation of the layout.

★ ★ ★

ON THE COVER:

Mr. Arthur Birch built the "Wasp" in 1963 and it is the standby loco on the passenger-carrying railway at the Australian Reptile Park in Gosford, N.S.W. The main working loco is a replica of a Baldwin 2-6-2 of about the year 1910 and was built by James Jackson of Brisbane in 1967. Photo by Peter Gospel.

★ ★ ★



I noticed a name new to me when I called at Melbourne Sports Depot this week. The odd looking locos and rail buses are the product of Heinzel (of whom I know nothing) and have the usual deep European flanges. Quality would have to be top class to justify the prices asked. There is also a strange looking 3 car self-propelled passenger set by the same manufacturer.

More reasonably priced, in my opinion, are the Wrenn locos, Cardiff Castle 4-6-0, 8F 2-8-0 and an 0-6-0 tanker. These are really the old Hornby line, and are fitted with the superb Hornby ringfield motor, with improvements, for which that maker was justly famous. Tri-ang couplings are standard, and the clip on Hornsby coupling is also supplied.

MSD also have the AHM BL2 Diesel Elec. locos in 3 road names, HO scale, NEM flanges, Marklin type couplings. I was impressed with the Peco switch for remote control of electric points. This is an assemble-it-yourself unit and should fit readily on the average size control board.

For your N scale township, check on the two types of street lamp and four face tower clock at MSD. These are illuminated by replaceable lamp fitted to the base. There is also a set of three illuminated signs for a hotel-cafe. Separate bases are cemented to cutouts in your building, and the signs are plugged in. Excellent.

Hearnes Hobbies, Flinders Street, are affecting extensive alterations so that their stocks of Tri-ang and Lima may be shown in working locations. Should be ready about the time you read this. I can recommend Hearnes own brand of balsa cement.

For Testro and Pactra hobby paints, see Hearnes at top of Collins Street.

At the Dockyard O gauge has expanded into two full showcases. It would appear that every conceivable detailing part is available for both car and loco. For the HO passenger fan, Balboa coaches are shown in UP, SP and GN livery. Stocks of Japanese-made brass locos continue to expand. Price range is considerable too.

At McEwans I saw some Swedish made jewellers' pliers and cutting pliers under brand name "Bahco." The price is a little higher than for similar items on the same show stand, but I think it is well justified by the excellent quality of the Swedish made tool. These should last a lifetime.

Those modellers who live at the South-East corner of Melbourne may like to call on Alan Stebbing, Superior Timbers, 2211 Princes Highway, Springvale North, or phone him on 546-4288. As well as being able to supply suitable quality timber for your layout framework, etc., Alan keeps small stocks of Peco and Shinohara track and points, Kumata point motors, a Rivarossi loco or two, Superquick buildings, and Australian Model Craft Co. lines. Also usually on hand are some used Marklin and Tri-ang stock. Alan has also been experimenting with rectifiers in Marklin locos so as to be able to run them on his two rail DC system. If you also have been working on this angle Alan would be pleased to hear from you.

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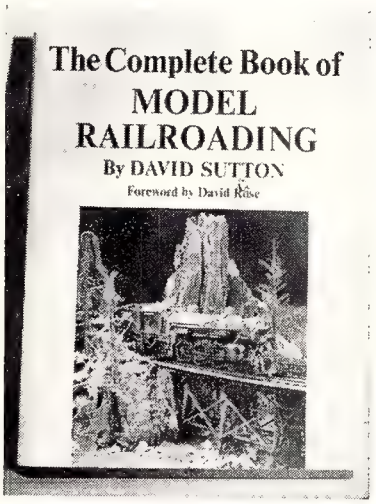

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More than 600 original photographs, taken by the author, a professional photographer, plus dozens of charts, wiring diagrams and suggested layouts of pikes, illustrate the text.

Sutton not only discusses the latest refinements—such as expertly detailed locomotives, transistorised throttles, ASTRAC (a new concept for radio-frequency control)—but also the basic concepts of model railroading itself.

He describes the different types of equipment available; how to build your own models; how to further authenticate the appearance of your locomotive through the addition of details; the whys and wherefores of maintenance to keep them running in top condition; and the secrets of painting and ageing techniques to give your model a more prototype look.

The book covers the planning of a model railroad, from layout design and track plans, to scenery and mountain building, special effects and type of equipment to use.

Rolling stock and the great variety of cars which can be put into use in your model empire are discussed in a wealth of detail. Basic wiring techniques are thoroughly illustrated to help you eliminate unnecessary complication and avoid a tangle of wires beneath your layout. The author also describes the great pleasure and advantage in running trains in prototype fashion.

What's more, the author has "deliberately included the names of manufacturers and/or sources of supply, and in some cases has listed parts numbers and catalogue references for the express purpose of making it easier for you, the reader, to be able to track down a particular item or piece of equipment which either strikes your fancy or is important to your model railroading operation. While this may possibly appear commercial in one respect or another, you will find it a definite aid when you visit a hobby shop and attempt to describe a particular item you wish to purchase."

"Anyone who reads this book," warns David Rose, "will forever be caught up in the fascinating web of rails, the symphony of engine and locomotive music, and the thrill of building and operating a model railroad empire of his own."

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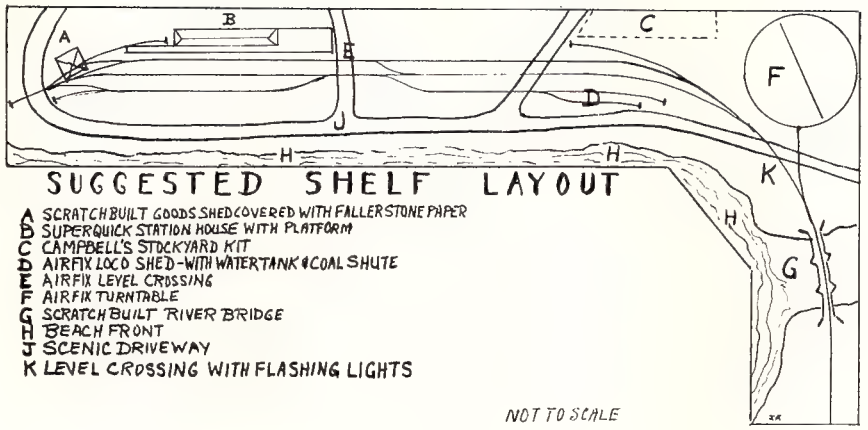
SUGGESTED SHELF LAYOUT
A SCRATCH BUILT GOODS SHED COVERED WITH FALLER STONE PAPER
B SUPERQUICK STATION HOUSE WITH PLATFORM
C CAMPBELL'S STOCKYARD KIT
D AIRFIX LOCO SHED-WITH WATERTANK & COAL SHUTE
E AIRFIX LEVEL CROSSING
F AIRFIX TURNTABLE
G SCRATCH BUILT RIVER BRIDGE
H BEACH FRONT
J SCENIC DRIVEWAY
K LEVEL CROSSING WITH FLASHING LIGHTS
NOT TO SCALE

Do you, like many other modellers, have a space problem? You do! Well, then, perhaps

VICTOR HARBOUR can help you.

By ROBERT C. PERKINS

Situated 50 miles from Adelaide by road, currently being turned into a high speed freeway, and 82 by rail this ever-growing township has already become South Australia's most popular holiday resort. Nestled on the shores of Encounter Bay in the South Coast area of this State, Victor Harbour has many tourist attractions.

Victor Harbour is also the terminus of a 51 mile branch line from Mt. Barker Junction in the Mt. Lofty ranges. The station layout is well worth considering for that shelf layout. Unfortunately, however, this station and branch line is completely dieselised now and no steam facilities are provided. The last regular steam train worked during October, 1959, although several appearances are made by different associations with large power steam locos.

The township is approach along the shores of the bay, track being only a few yards from the water's edge in most places. The mouth of the River Hindmarsh is crossed on a very historic bridge, the first reinforced beam and slab type bridge to be used for railway traffic in Australia.

The line follows the gentle curve of the bay keeping only a couple of hundred yards from the shore, behind guest houses, holiday shacks, recreation fields, etc., facing the beach front. To the right as you enter the station are the backyards of homes, shops and businesses facing the main street. The yard itself is guarded by a tall, lattice type lower quadrant home signal, towering above the rooftops, the branch itself being operated by train order system. The single line soon becomes double track and then a dead end road branches off to the right to a 90 foot turntable (electrically operated) and disused livestock yards.

To the left at this point is all that remains of a single road engine shed and lighting up bay. One can still see the concrete floor and ashpits of the loco yard. A level crossing, unprotected, crosses the three tracks here on an angle, passenger trains using the centre road and entering the platform via points just prior to another level crossing and, believe it or not, this crossing is protected by English style level crossing gates. (Airfix perhaps.)

You can see from the plan that the yard again widens to three tracks, a loop through the stone goods shed and two deadend sidings. The shunting spur at the south end of the yard is very short and rarely used as it crosses yet another road, this being a very busy scenic drive. Photo one shows the station building which is constructed of red brick with a green corrugated iron roof, white timber work and picket fences with an asphalt covered platform. This could probably be made up out of two Superquick kits, or an American railroad station kit.

The goods shed is of yellow stone with a red roof in need of repainting. Photos two and three show the remains of the loco depot and the turntable. This depicts how narrow is the yard. The final photo depicts the rail bridge (foreground), and road bridge only a few yards behind, the photo itself being taken only 10 yards from the shores of Encounter Bay.

A daily passenger service operates between Victor Harbour and Adelaide, leaving Adelaide 6.10 p.m. Mon.-Fri. and Sundays departing Victor Harbour at 8.45 a.m. Mon. to Sat. mornings. Two down trains operate Saturdays at 9.00 a.m. and 12.55 p.m. returning to the city at 5.30 p.m. Saturday and Sunday evenings. These services are operated by 75 class, 1926 built rail motors and trailer or 250 class 1956 built diesel hydraulic rail cars. Freight services operate three times a week hauled by 900 or 930 class 17,000 h.p. diesel electrics.

I have not gone into details of size of buildings, etc., as this article was designed to give you a prototype station layout which could fit on a shelf of approximately 9 in.-12 in. width using low relief buildings or painted scenery background. The accompanying plans show station layout as is (April, '68) and how it could be used on that shelf layout. Hoping this will be of use to someone.

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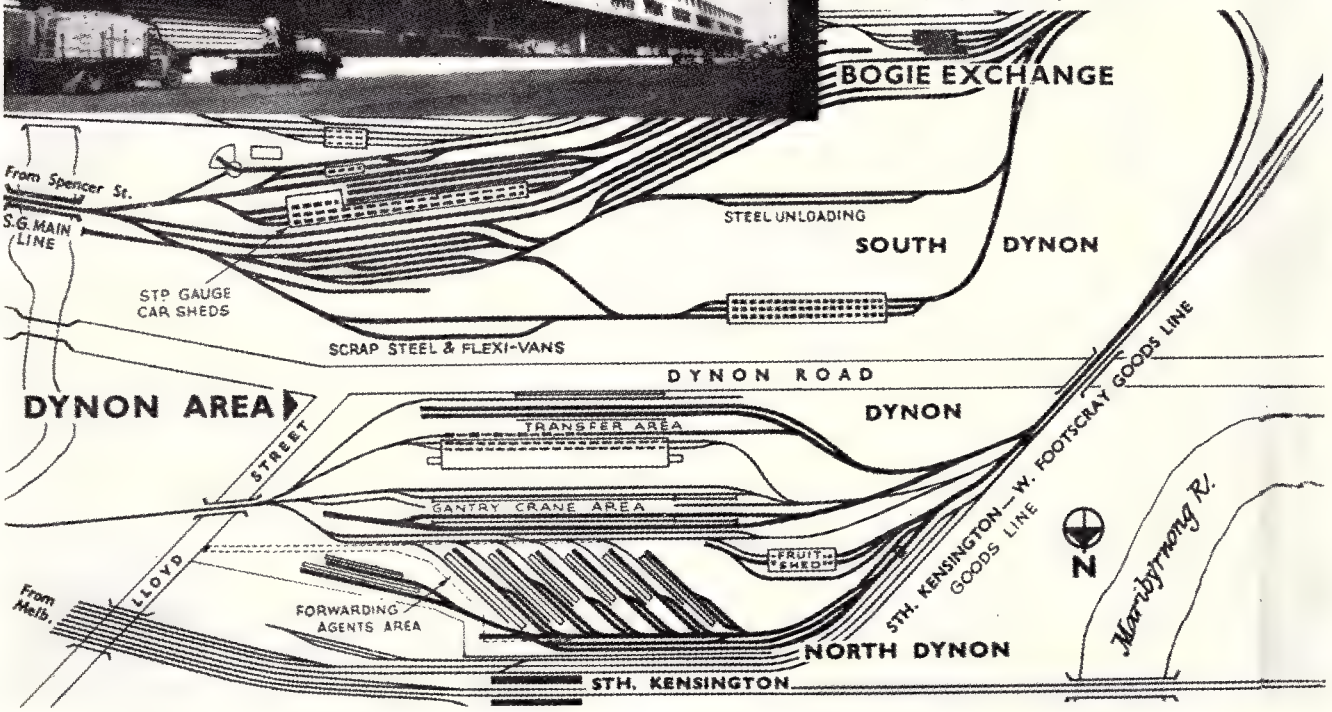


Come with us on a tour of Victorian Railways Dynon freight terminal. It is here that the standard gauge (4 ft. 8½ in.) line from New South Wales and Brisbane is intergrated with broad gauge (5 ft. 3 in.) lines from all over Victoria and South Australia. Within the Dynon area is the bogie-exchange centre.

You will see rail-road co-ordination that includes Flexi-Vans and other specialised containers, and the activities of forwarding agents who provide door-to-door service.

Dynon also handles all broad gauge freight traffic to the Goulburn Valley and North-eastern Victoria.

Scrap Steel and Flexi-Van Area

We first enter the scrap steel loading area, where scrap up to 3,000 tons each week—is loaded for Port Kembla smelting works. This site was chosen as standard gauge rail vehicles unloaded in the South Dynon area can be readily brought here for reloading and so reduce to a minimum the time a vehicle is out of running.

Carriers use the weighbridge nearby to accurately check the tonnage of scrap metal brought in for loading.

Scrap is quickly loaded by front end loaders that scoop up 30 cwt. of metal at a time. The raised platform also allows tip-truck road carriers to quickly dump full truck loads of metal on the surface below; when scrap arrives packed in 44-gallon drums, a 6-ton mobile crane is also used; steel filings and turnings are tipped into 5 ton skips to be loaded into trucks by crane.

At the rear of the scrap metal area is a special site for the transfer of Flexi-Vans between road and rail vehicles. It has been designed to accommodate up to twenty 76 ft. standard gauge rail wagons that each carry two 35 ft. Flexi-Vans.

Steel Unloading Area

We next inspect the South Dynon area, in which all tracks are standard gauge.

First we see the steel unloading area where train loads of up to 1,200 tons each arrive from port Kembla, N.S.W., bringing steel plate, girders and many other types of industrial and building construction steel. By using 6 ton mechanical fork-lift machines and 5-6 ton mobile cranes, the steel is unloaded at a rate of up to 300 tons an hour.

At the rear of the unloading area are arrival and departure tracks that accommodate up to 120 rail vehicles each.

On the other side of the wire fence is the Melbourne-Sydney standard gauge passenger line; the building nearby is the bogie-exchange centre.

Bogie-Exchange Centre

The modern Bogie-Exchange system of rail freighting, pioneered in Australia by the Victorian Railways. Note the standard gauge track within the broad gauge. and the sets of four electric jacks.

South Dynon Shed

On your right is the South Dynon shed, 880 ft. long and with 128,400 sq. ft. of floor space. Its roof is supported by outside pillars only, to allow maximum freedom of movement inside. Ramps at each end and the middle enable carriers to take delivery on the platform itself under cover from weather. Trains with galvanised iron, sheet steel, tinplate, and wire arrive here from New South Wales with 900-ton loads which can be unloaded at the rate of 200-tons an hour.

Liquid nitrogen refrigerated containers carry frozen vegetables between Adelaide, Melbourne, Sydney and Brisbane.

Dynon Transfer "Roads"

Across Dynon Road we enter the Dynon area that has a standard gauge link with South Dynon.

Also on your right are special transfer area tracks where general goods are transferred between wagons on broad and standard gauge tracks with the aid of a gantry crane and on your left, under the shed verandah, is a two-gauge track which can accommodate both broad and standard gauge vehicles, that are loaded direct from road carriers' trucks. The advantage of the dual gauge track is that it allows the maximum and flexible use of loading space.

The broad gauge connections to the dual track is at the Melbourne end of the area. The standard gauge connection is at the opposite end where there is also a special points switch that connects both broad and standard gauge lines.

This area also includes special ramps, for both broad and standard gauge lines, to drive motor cars on and off 2-tier CAR PAC rail wagons.

Dynon Shed and "No. 5 Road"

Turning along the other side of the shed, you will notice, on your left, how the shed verandah protects road carriers who bring general merchandise for railing to the Goulburn Vally and North-eastern Victoria. This activity is so organised that sections of the platform are reserved for particular consignment destinations to allow rail wagons to be marshalled during loading in the correct order for efficient train running.

On your right is "No 5 road" where rail vehicles are loaded for similar destinations and in the same planned manner for train marshalling. Loading here takes place direct from road to rail. The next loading track on your right is "No. 6a road" where heavy consignments can be loaded with the aid of any of three gantry cranes. Tracks inside the shed and "No. 5, 6 and 6a roads" are all broad gauge.

Gantry Crane Area

At the west end of the Dynon shed, we turn right towards the "gantry crane roads". Of the three cranes operating here, the largest can lift 25 tons and the other two each have an 8 ton capacity. These cranes serve "No. 6a road", and two other tracks—one standard and the other broad gauge—each accommodating 70 vehicles. Also at the west end of this area we see a wide variety of rail-road containers that are speedily transferred by crane between road carriers' trucks and special rail wagons.

These containers include standard and insulated types jointly owned by the Victorian and N.S.W. Railways and others privately owned and built to carry general merchandise and industrial liquids. Some private containers have an inbuilt refrigerator unit and there is a special container with a steam heating coil that allows certain commodities, like tallow, to be liquefied for quick filling and discharging. Another interesting container has been developed for use on ship, road and rail between Tasmania and the mainland states.

Administrative Office

Leaving the gantry crane area, we pass the Dynon administrative office that is the control centre for the whole of the Dynon freight terminal. The office is in touch with Sydney by teleprinter and all other centres of Victorian Railways organisation by telephone communication; it co-ordinates the supply of rail vehicles, the loading and unloading of road carriers' trucks, the receiving, marshalling and dispatching of trains and the supervision of staff at the terminal.

As we leave the Dynon area, we pass through one of the typical freight check points at entrance and exit gates where Victorian Railways security staff control incoming and outgoing road traffic vehicles. Note also the strong high security fences for the protection of customers' goods and railways' property.

Forwarding Agents

Leaving Dynon we turn left on to Dynon Road and travel along Lloyd Street to the forwarding agents area at North Dynon. On entering the area, you will notice a series of long, sheltered platforms bearing the names of private transport firms. These firms collect goods by road from all over the metropolitan area for loading into rail vehicles, and also arrange for delivery of the goods from the rail-head at the vehicles' destination.

When standard gauge was extended to Melbourne, provision was made in this area for a 50 per cent increase in forwarding agents activity. But such has been the success of this form of door-to-door rail-road co-ordination that forwarding agents' facilities had to be extended to cope with a 124 per cent increase in business.

The platforms here range from 275 to 720 ft. long. All but two have a broad gauge track on one side and a standard gauge track on the other. This allows goods to be loaded from road level into the desired rail gauge vehicle or for goods to be easily transferred, across the platform, between rail vehicles.

As we travel to the west end of the area you will notice that the broad gauge tracks at each platform connect with long tracks (on your left) where the 60 m.p.h. Adelaide fast freight trains arrive and depart. At the other ends of the platforms, the standard gauge tracks similarly connect with the arrival and departure tracks of New South Wales and Brisbane fast freight trains. Also at the west end of the area is a rail vehicle weighbridge.

Fruit Shed

From the west end of the forwarding agents area we can see the interstate fruit shed. This is 500 ft. long with broad and standard gauge tracks. Train loads of up to 900 tons arrive here with tropical fruits and vegetables from New South Wales and Queensland, and celery and tomatoes from South Australia and Western Australia.

Standard Gauge Running "Roads"

Turning around the west end of the forwarding agents' platforms, we travel alongside the standard gauge arrival and departure "roads" which, you will notice, are connected with the standard gauge tracks at each platform. You now get an ideal view of the six platforms that are arranged in ladder formation.

As you travel to the east end of the area you will see, on your left, raised suburban electric tracks that are also used for broad gauge midland and south-western intrastate trains and the Melbourne-Adelaide "Overland" to make their line connections. Visible from the area is South Kensington station. Returning towards the area exit gate, you see on your left the newest forwarding agents' platform which is 750 ft. long. This was built to cope with the increase in agents' traffic. Near the exit gate is a weighbridge for road carriers to check the weight of their loads.

ARMCHAIR REVIEW

Contributions to this column are welcomed

BOOKLET

NEW ZEALAND FOR 90 CENTS
N.S.W. Rail Transport Museum
Box 1983, G.P.O., Sydney, N.S.W., 2001.

If you are fortunate you will already have paid a visit to New Zealand, where handsome giants of steam locomotives once graced the rails, providing 3ft. 6in. gauge power on a scale undreamed of in Australia. Perhaps you are planning to visit New Zealand soon; or perhaps you may never have the chance to go there.

The solution to your problem? The N.S.W. Rail Transport Museum's New Zealand booklet—a 52-page publication giving a full description and a map of the South Island system, comprehensive locomotive notes on 18 classes and a survey of 20th century locomotive practice in general.

Produced for the Rail Transport Museum's 1968 tour of New Zealand, the booklet contains 23 pictures including gems such as the first K class 4-8-4 on trials, and several photos by W. W. Stewart including a streamlined J class on an Auckland-Wellington limited.

This booklet, 8in. x 5¼in. in size and printed on art paper, is available for only 90 cents including postage.

FILM STRIP

N.S.W. 57 & 58 CLASS LOCOMOTIVES
N.S.W. Rail Transport Museum
Box 1983, G.P.O., Sydney, N.S.W., 2001.

The N.S.W. Railways mighty 57 and 58 class engines were withdrawn before most of us were taking colour photographs. Now you can recapture these giants in action in full colour with this filmstrip, which is readily mounted into convenient 35mm slides. Full descriptive literature is included. Among the highlights are 50 + 57 at Zig Zag, 36 +57 nearing Demondrille, 5719 at Cootamundra, 58 class at Katoomba and 18 others. Price: $3.15 post free.

35MM. SLIDES

QUEENSLAND NARROW GAUGE CANE LOCOMOTIVES
Railroad Book Company of Australia
189 Homer St., Earlwood, N.S.W., 2206.

Few if any of the narrow gauge steamers are left working the sugarcane fields of Queensland and New South Wales. Unfortunately, the diesels are a'comin' in. Even if you don't model narrow gauge on your layout this collection of eight excellent reproductions of these fascinating locomotives should be in every modeller's slide collection. 45 cents each or $3.50 for the set of eight posted.

SMALL PUBLICATION

MODEL RAILWAY NEWSLETTER
Australian Model Craft Co.
Box 118, P.O., Albury, N.S.W., 2640.

Some of you may have picked up this newsletter from the counter of your favourite model shop but those who live in the country or far from such stores may wish to keep up with the excellent products which are imported by this well known firm. Though primarily an advertising brochure each issue contains such a wonderful variety of news about model railway supplies which are entering the country that it is indeed a poor modeller who cannot send 10 cents in order to receive a sample copy by mail.

NATIONAL CONVENTION, AUCKLAND

Every two years the New Zealanders have a model railway convention in one of their cities. This year it was your Editor's pleasure to attend the convention in Auckland over the Easter holiday weekend. During his now many years of railway modelling the Editor has attended many such gatherings but never one which has been so well organised.

This is but a brief resume of the programme which was planned for the visiting modellers and much more space would be needed to describe the events in detail. Briefly, the convention began on the Friday morning with the official opening. Convention headquarters were at the Auckland Building Display and Development Centre in the heart of Auckland and immediately adjacent to the hotel where I stayed. Later in the afternoon I was invited to officially open the new clubrooms of the Auckland Metropolitan Railway Club.

This magnificent building has just been completed in the grounds of the Museum of Technology and Transport which occupies a large park adjacent to the Auckland Zoo.

Also in this park I was able to inspect the wonderful narrow gauge locomotives which are being preserved by the Bush Tramway Club. To ride on these locomotives as I did is a wonderful experience.

That evening I had the honour of being asked to be one of the five judges for the convention model competition and during this time was able to make the acquaintance of one of the other judges, Mr. W. W. Stewart, famed throughout New Zealand as a railway historian, author and painter of railway subjects. To meet Bill Stewart was in itself worth the trip to New Zealand.

On the Saturday I continued my judging duties whilst other members of the convention made the rounds of the model shops.

To most modellers the highlight of the convention was the cocktail party and dinner held on the Saturday evening. During this magnificent repast entertainment was provided by guest artists. Later I fulfilled the prime object of visiting the convention which was to address the guests and present the prizes for the model competition.

The prizewinners are listed elsewhere on this page and some of the winning models are shown in the accompanying photographs. I must mention the great pleasure I felt when I was presented with a magnificent oil painting, executed by Bill Stewart, of a Ka locomotive hauling a mixed goods train through the snow below Mt. Ruapehu. This now graces the editorial office and evokes extreme envy amongst my colleagues.

The morning and afternoon of Sunday were spent in visiting no less than 12 model railway layouts varying in scale from 9½ in. gauge live steam to N. The organisation which enabled 250 or so guests to see so many layouts is a credit to the committee of the New Zealand Model Railway Guild which organised the convention.

I returned home with the impression that our New Zealand friends are keen to attend a convention in this country and, in fact, many asked me if there was any possibility of one being held in 1969. I promised that I would do my utmost to support such a venture.

NEW ZEALAND CONVENTION PRIZEWINNERS

LOCOMOTIVES
1st: R. B. Knight, N.Z.R. EC Class Electric BO-BO.
2nd: B. Lilley, N.Z.R. Garratt.
3rd: R. B. Knight, N.Z.R. Fowler 0-4-0.
Highly Commended: R. B. Knight, N.Z.R. W Class 2-6-2; T. Deville, Dutch Diesel Electric.

ROLLING STOCK
1st: J. Tuckey, N.Z.R. JC Sheep Wagon.
2nd: C. Zeff: N.Z.R. Clayton Steam Railcar.
3rd: N. W. Gaby, N.Z.R. Derrick Crane.
Highly Commended: N. W. Gaby, N.Z.R. YD Dump Car; R. B. Knight, N.Z.R. Inspection Car.

STRUCTURES
1st: N. W. Gaby, N.Z.R. Wagon Repair Shop.
2nd: E. D. Dunn, American Station Scene
3rd: N. W. Gaby, N.Z.R. Coal Crane.

BEST IN SHOW
R. S. Collis, American Lumber Mill.

BEST N.Z.
J. Tuckey, N.Z.R. Sheep Wagon.

PAPER PRODUCTS for MODELLING

Various articles on scratch building call for pasteboards, papers, etc., which are usually expressed in 'x' ply or 'x' sheets. The chart below gives an approximation of the various materials which can be used with their relative thicknesses.

WEMBLY SUPERFINE PASTEBOARD (semi-glazed)

2 Ply ..... 0.007 in.
3 Ply ..... 0.010 in.
6 Ply ..... 0.013 in.
8 Ply ..... 0.027 in.

Available in sizes 20 in. x 25 in. (Royal) 25 in. x 40 in. (Double Royal).

BURNIE SPECIAL OFFSET S/O:
30 in. x 40 in. 100 lb.—0.005 in.

BURNIE H/S DUPLICATOR S/O:
D.L.P. 33 lb.—0.0045 in.

A.P.M. N.C. LITHO:
80 lb.—0.008 in.

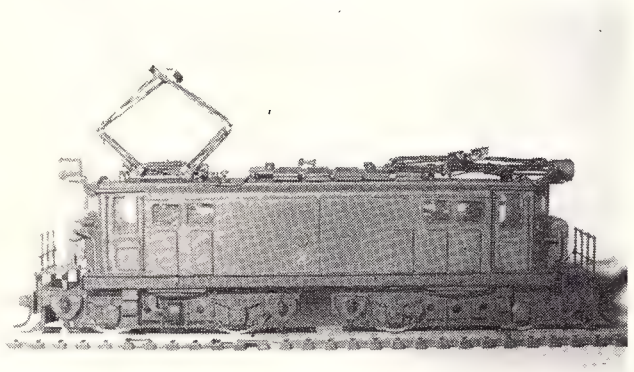
The above are all available in white.

BROWN MANILLA FOLDERS:
0.014 in.

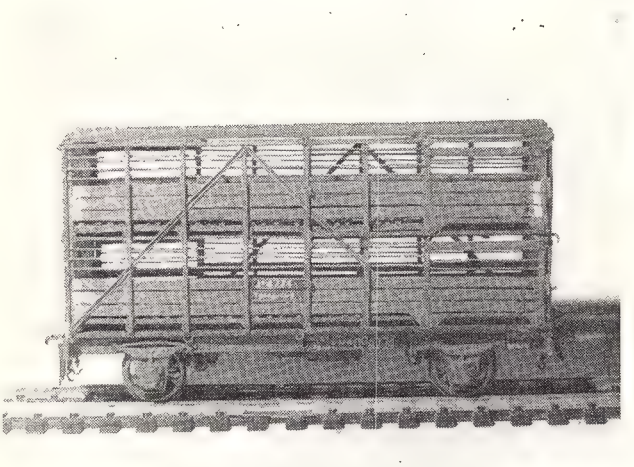
These can be very useful for many purposes, as it usually has one glazed and one matt surface, and it can be quite successfully painted.

Bill Rixon.

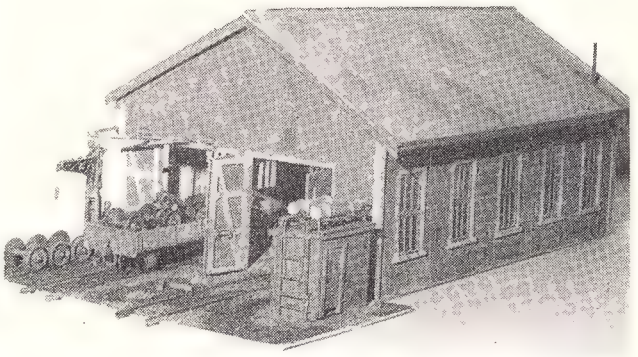
NEW ZEALAND NATIONAL CONVENTION 1968



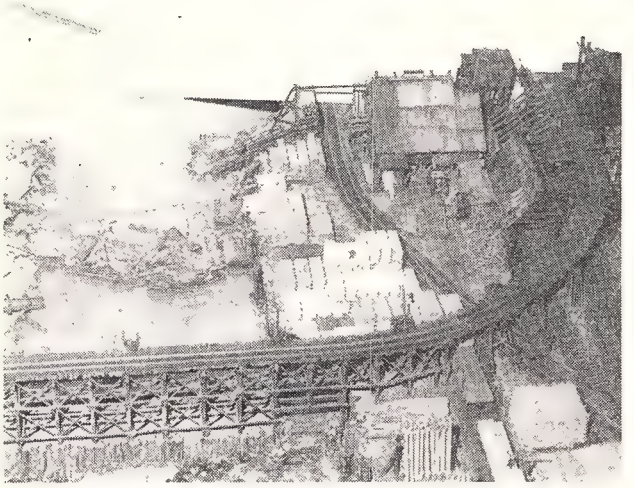
This N.Z.R. E.C. class electric loco. constructed by R. B. Knight, was judged the best in the locomotive competition.



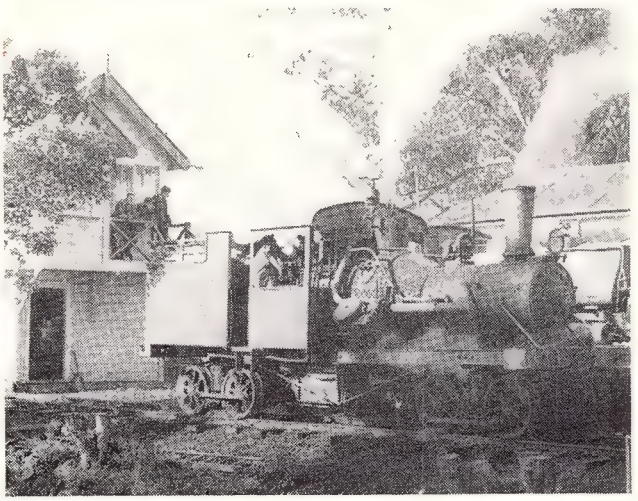
Sixteen-year-old John Tuckey not only won the rolling stock contest with this sheep van but also that for the best N.Z. model.



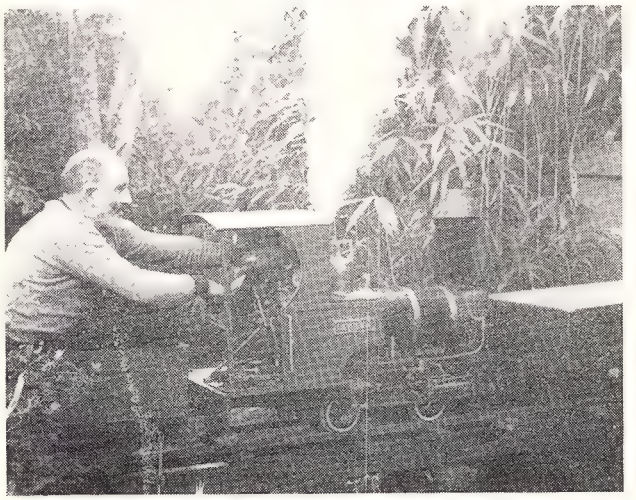
N. W. Gaby gained first prize in the structures contest with this beautifully detailed wagon repair shop.



R. S. Collis won the prize for the Best in the Show at the Convention with this American lumber mill.



The Bush Tramway Club of Auckland has three locomotives at present on their tracks. This is the Climax.



One of the railways visited was the garden 9½in. layout of Ralph Sewell of Milford, Auckland.

A scale OO/HO trackage system with prototype fixed frog points, or switches, yet Universal in application. Now you can run all the British, American, German, Italian, Swiss, French, Japanese and other trains together if you wish. Peco-Streamline sets a revolutionary new standard in model track, for apart from its unique universal application it is virtually unbreakable, already flexible, no ties to cut, conforms to International standards and employs solid nickel silver or brass Code 100 rail, special plastic base with 130 woodgrained dark brown sleepers or ties per yard—each with neat prototype rail fixings. The minimum of fixing is required and special pins can be inserted without need for prior drilling. Supplied in 2-rail form, but stud contact strip for Marklin and inside conductor rail for Hornby 3-rail or Trix can be added. Extremely flexible it can be curved to any radius or laid absolutely straight and because of its abnormal strength may be used again and again without fear of damage. With nothing to warp, twist or rust it is equally suitable for use out-of-doors. Peco-Streamline can readily be joined to other makes and is truly—Universal.

OO/HO Ref. No. SL-100X with N/Silver code 100 rail ..... $1.10 per yard
OO/HO Ref. No. SL-100B with brass code 100 rail ..... $1.00 per yard
OO/HO Ref. No. SL-102X with N.S. Rail but with imitation concrete sleepers, code 100 rail ..... $1.10 per yard

Points to Match: HO/OO

SL-88X R/Hd 5ft. radius	$2.85
SL-89X L/Hd 5ft. radius	2.85
SL-91X R/Hd 2ft. radius	2.25
SL-92X L/Hd 2ft. radius	2.25
SL-93X Short Crossing 24°	2.25
SL-94X Long Crossing 12°	2.50
SL-97X Y Point	2.25

Joiners etc. HO/OO

SL-10X Metal Rail Joiners 24	38c
SL-11 Insulating Joiners 12	33c
SL-14 Track Fixing Pins, Pk	33c
SL-17 Stud Contact Strip, Track 6ft.	35c
SL-18 for Points 4ft.	35c
SL-30 Uncouplers Hornby-Peco	50c
SL-37 Track Cleaner	35c
SL-40 Rail-built Buffer Stop kit	30c
SL-41 Sleeper-built ditto	35c
SL-70 Point Motor	1.25
SL-71 Adaptor Base for using it above baseboard	25c
SL-72 Actuating Switches	38c
AC-15 Hand-throw Point Lever	50c
C-30 Loose sprinkle Ballast	65c

Foam Underlays for Track & Points HO/OO

*SL-50 16½ft. length for track	1.35c
SL-51 For Points 91X above (2)	60c
SL-52 For Points 92X above (2)	60c
SL-53 For Points 97X above (2)	60c
SL-54 For Points 93X above (2)	60c
SL-55 For Points 88X above (2)	65c
SL-56 For Points 89X above (2)	65c
SL-57 For Points 94X above (2)	65c

*Expected back into stock in August.

PECO HO/OO Track lines are supported by a wide range of rolling stock accessories and Wonderful Wagon Kits of British Railways Private Owner vehicles.

For a fully illustrated catalogue of PECO (all gauges) ask you dealer for PECO CATALOGUE 1968. Price 50c (Posted 65c). There should be an Australian Price List tucked inside, dated 1/5/68.

For an abbreviated booklet on PECO plans, and products in all gauges ask for your copy of "PECO in Australia" No. 5, May 1968. Price 5c.

THE Lilliputians GAUGE

IN N GAUGE

PECO

PECO N Gauge productions are f ful copies of their "big brot HO/OO Lines, and SL-300X nickel silver rail, fully flexible yard lengths but a 9mm gauge and photographi you wouldn't know the difference. Price SL-310X Metal SL-311 Insulated Rail Join SL-388X & 389X R/Hd & L/Hd 3ft. rad po SL-394X Long Crossing & SL-397X Y Points m just like "big brother" points do. And it doesn't here, but there are accessories and Foam Under and rolling stock items and loco body kits. For details see you N Gauge dealer and the Peco C logue price 50c. (posted 65c.) or PECO in Aust —No. 5—May 1968 5c. and AMC N Gauge F List—2nd Edition—May 1968—Price 5c.

ATLAS IN N GAUGE

AND NOW "ATLAS" is in Australia. The om are faithful copies of the prototypes just as Ri thin, but soon all N Gauge dealers will have, p will give an idea of what to look for—

O-8-O Steam Loco SF or Indiana Harbor Belt
E8 Diesel Electric 6-wh bogies, SF or B&O ..
Fairbanks Morse, D.E., Single Unit, Sante Fe ..
Santa Fe or B&O Passenger Cars (full length) i and Observation Car at $4.65.
Box Cars, Florida & EC or Santa Fe $2.65; Reef Cars—Peabody $2.65; Cattle Cars NYC or SF $ $2.35; Cabooses Santa Fe $3.25; Pulpwood Ca Mobil or Shell $3.25.

ARNOLD RAPIDO N GAUGE

Arnold Rapido Continental prototype locomotiv type lines is A1 quality and is backed by a mag street motor cars, and a nice electrical gadge price list is incorporated with all other N Gauge N Gauge Price List—2nd Edition May 1968. Pric We do not distribute "Sentinel" N Gauge Point that themselves. But we like them, nevertheless

TT-3 12mm. GAUGE

GEM TT-3 Track & Points have returned to stock, at a reduced price (hooray!) and a good many dealers still carry lines for TT-3.

Gem-31 Plastic based, Flexi-track with nic silver rail, in yard lengths ..... $1.
Gem-32 Points to match in many varieties, each $2.25
Gem-33 Point Levers with positive loco 45c
Gem-35 Signal Ladders, brass 4in. long .. 20c

Other stocks specifically designed for TT-3 include PECO Track and rolling stock; Bilteezi Structure Kits; JASCO Scale Posters. In the GEM range there are a number of TT-3 loco kits and loco body kits.

"O" GAUGE

PECO O Gauge Flexi-track with choice of Nickel Silver or Treated Steel Rails is available, the former at $2 per yard, the latter at 79c per half yard; also available separate sleepers, rails, chairs (two types) for point making. See PECO Catalogue or PECO in Australia No. 5, May 1968. Price 5c at your dealers, for more details.

CHECK WITH YOUR HOBBY SHOP FIRST

For Trade Contact –

ning into its own! Of course, it has
d its test of being with us for good,
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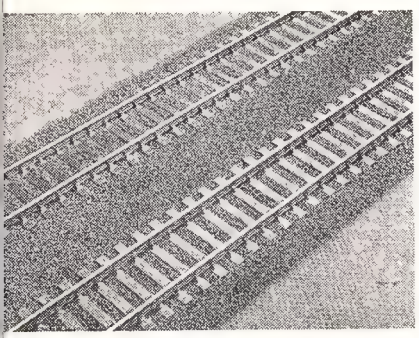


a coaches are Rivarossi made and
i HO lines are. Stock is, at this date,
ly, a full range. This list is brief, bui

wh tender $30.95
..... $19.95
..... $17.50
man, Combine or Dining Cars at $4.25

O & G or National Dairy $2.65; Hopper
Gondolas—Norf & Sthn or Cotton Belt
load, S.P. $3.25; 3-dome Tank Cars

d rolling stock with a few USA proto-
nt range of structures and bridges and
ge. Full Catalogue $1. The Australian
s including Kibri, Merten and Busch in
from your dealer.
was said in the last A.M.R.M—they do

AUSTRALIAN MODEL CRAFT PUBLICATIONS

rify the position of price lists and informative
s, published by A.M.C. in Australia, stocks will
upe d covered by separate booklets and price
– seven in number from 1/7/68. Many are
separated and available.

w for

CO the HO/OO Scenic Division—Booklet with
nd price list. Free. That's the first edition.
SSI HO/OO — news of April, 1968, with sepa-
free price list folder. Price 5c.
in Australia (all gauges) Booklet, with separate
list folder. Price 5c.
GE 2nd Edition Booklet, with separate price list
r. Price 5c. (May, 1968).
O/OO BRANDS other than Peco and Rivarossi
ese a fully illustrated Department 11 Gem, Rom-
K's, Jackson & Sentinel Booklet (with prices).
5c. (Reprint to include other HO/00 brands.)

ue shortly

l purpose price booklet of books, magazines.
, raw materials, screws and nuts and electrical
. It will be a free issue, with any bought booklet.
laneous Gauges other than HO/OO & N. includ-
Narrow Gauge. Probably be "for free", too.

HO GAUGE

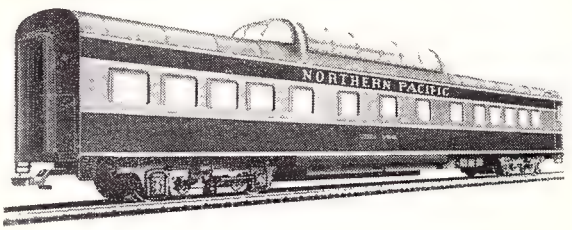
2—RAIL
12V. D.C.

Rivarossi

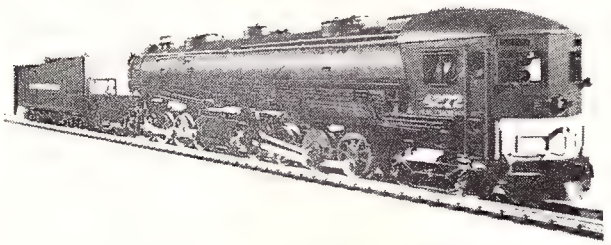
RIVAROSSI is a name all keen railway modellers know. From a first casual glance RIVAROSSI quality is apparent. But take a close-up look at a RIVAROSSI model and delight in the beautiful workmanship . . . the faultless detailing . . . the overall authenticity that marks each RIVAROSSI product as a masterpiece in miniature. Here are models as externally perfect as modern skills can make them; as smooth and reliable in operation as precision engineering plus a brilliantly performing RIVAROSSI motor can ensure.

LATEST ARRIVAL

Northern Pacific Vistadome Coach to match the other N.P. Coaches. Length 12½ in. Internally Fitted. Chocolate and green. No. 2764. Price **$6.75.**



THREE BIG LOCOS AT LOWER PRICES



The No. 1248 S.P. Cab Forward 2-8-8-2 artic with 12-wh tender, 17½ in. long, is now only $64.75 (was nearly $70).

No. 1238 N&W Mallet Y6B Articulated with 12-wh tender, length 16½ in. is now only $59.95 and No. 1255 the 2-10-2 with vanderbilt tender of the B&O (length 14½") is reduced to $53.95.

stock in Australia.

It is impossible to even scratch the surface of the range of "Rivarossi" Loco, Coaches, Freight vehicles, track, trams and accessories here. For fuller details ask for RIVAROSSI News No. 3, April 1968. Price 5c. with which goes a full price list of lines normally in

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Ask also for the latest copy of Australian Model Railway Newsletter—the information newsletter that keeps you up-to-date.

"SUPER-QUICK" Low Relief Buildings Kit No. C1. Price 75c

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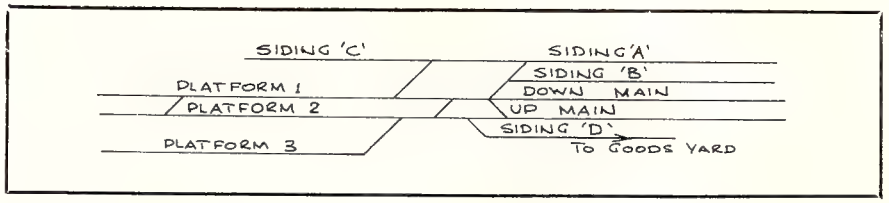


A QUIET NIGHT AT WINGROVE

by JACK McLEAN

It had been a rather trying Friday and so when the valiant few turned up that night, they pleaded for a quiet timetable. Well, 24 is pretty quiet as it was compiled when the line out of Wingrove was still single and anyone ought to be able to run the trains of a single line on a double line. (And there are prototype examples of that if anyone wants to enquire further.)

But just so the timetable wouldn't be too tame, I thought it might be all right to run the Show Special with seven cars, which rather ruined the quiet night as this little story will show.

There were three platforms at Wingrove when 24 was current but they were all rather long and you could stand a train and a rail motor at any of them or even two trains if they weren't too long. At present Wingrove has three platforms but you will recall from previous descriptions in the A.M.R. that they were purposely made as short as we could get away with.

There was a tight spot, too, in 24 which we had forgotten, around 10 in the morning. At this time, the 9.06 arrival motor is in Platform 2 waiting for a 10.00 departure. The 9.58 arrival Show has to run around or get a drop-on engine for its 10.24 departure. There is a 10.10 arrival passenger which has to go out to the yard promptly because the express cars and the mail cars have to be brought into Platforms 1 and 2 with the same yard pilot, and there are two light engines coupled which arrive at the home signal at 10.15 and uncouple there, one for the express and one for the mail which leave at 10.30 and 10.39 respectively. It's pretty tight but workable if nothing goes wrong, or no one does anything silly like putting seven cars on the Show Special. (And seven minutes equals one hour.)

When the Show arrives like this it goes into 3 which will take about an engine and six cars clear and the seventh car hangs out the end and blocks the throat of No. 2 and because the arrival engine can't run round, a drop-on engine is necessary and when it is coupled to the train, if it fouls the crossover by which the train has to cross to the down main line.

So, at 9.55 (we see in Diagram 1) the rail car was waiting in No. 2 Platform to leave at 10.00, the pilot and the express cars were in 1. The mail cars were in in Siding B and the Show Special was expected any minute.

By 10.05 (see Diagram 2), the Show Special had backed its last two cars out into Siding D and resumed its place in No. 3 Platform, enabling the rail car to leave. As a result of No. 2 road being clear, the yard pilot was able to run round the express cars so it could push them into No. 1 Platform, and then move out to Siding B to attach to the mail cars.

By 10.15 (see Diagram 3), it was known that the 10.10 arrival passenger would be late and would follow the 10.15 arrival light engines, to the two of which shown in the Working Timetable, a third has been added for the 10.24 Show. The pilot had brought out the mail cars into No. 2 and the three light engines were standing at the home waiting to uncouple.

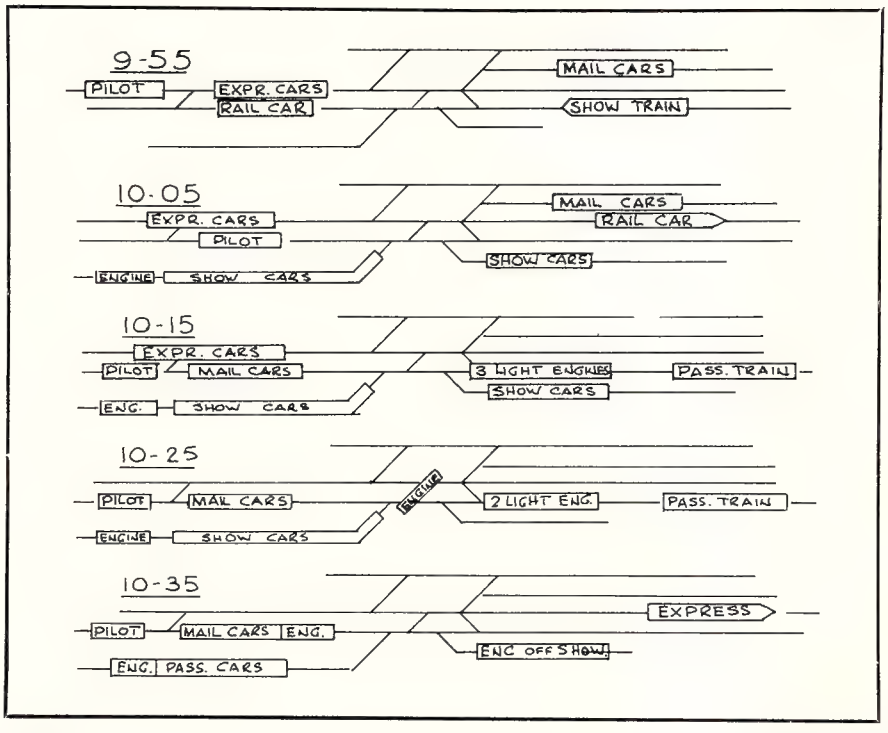
To get the Show Special out, the engine in No. 3 had first to back up and draw out the cars standing in Siding D, and bring the train back into the platform. The first of the three light engines was detached and ran forward to couple to the Show Special, but because the engine when coupled to the train was fouling the crossover at the platform end, it had to use both crossovers.

This is shown in Diagram 4, at 10.25, and the Show Special departed soon after. The second light engine was then brought in to take the express, and then the third light engine for the mail. The express departed a bit late, and then the engine off the arrival Show in No. 3 was moved out to Siding D to make room for the 10.10 arrival passenger which was very late indeed. The position at 10.35 is shown in Diagram 5.

Now if you happen to have been on the up passenger which should have arrived at 10.10 and you are thinking about writing to the District Superintendent to complain about the poor service, he will only tell you that the sudden unexpected increase in Show passengers necessitated a seventh car being attached to the Show Special and insufficient time was available to to properly pre-plan the arrangements.

On future occasions when a seventh car is necessary, Show trains will arrive and depart from No. 1 Platform and expresses will use No. 3.

And on future occasions when the Wingrove operators are looking for a quiet night, they hope they will get one, because all this happened in less than five minutes real time.



S.C.M.R.A. EASTERN DIVISION

Easter Convention 1968 Report

At 7.30 p.m. on Friday, 12th April, 1968, the first S.C.M.R.A. convention, hosted by the Eastern Division, got under way. The night's activities commenced with registration of contest entries, and while the judging committee were engaged in their task of selecting the best entries in various categories, a shunting contest was conducted. This avenue of our hobby is apparently one of those which picks the men from the boys, as was demonstrated by some of the attempts at solving the prepared problem.

When the loco performance test commenced, a number of comments were made as to the qualifications of the various units entered in the contest; however, all comers were accepted and the results proved quite interesting. Needless to say, the most expensive unit is not necessarily the most efficient; nor is the most sophisticated the most powerful.

The evening's activities concluded quite late, and all who attended apparently enjoyed themselves. Unfortunately, the original programme planned for Friday had to be changed due to a breakdown in communications somewhere along the line.

Saturday morning turned out to be a fine day, after some early showers, and the group gathered at the Caringbah railway station prior to moving off to the Sutherland Shire Model Railway Society's layout.

It was interesting to note that one of our number (who had just completed a round-the-world trip) was unable to find his rail ticket which had been carefully placed under his watchband. The layout which we inspected is a credit to all those who have worked on it, and considerable interest was shown in the automatic signalling arrangements which included hand-made colour light signals.

Also on display were some 'O' gauge models — the steam hauled Spirit of Progress—and quite a large number of scratch built steam locos.

The most challenging item, however, was the partially built 30 class tank loco which is the pride and joy of Mr. Bob Harvey of the old Hobbies Illustrated fame. The loco is being built to run on 7¼ in. gauge, and it is anticipated that it will be complete to the operating Westinghouse air brakes.

The party then journeyed to the South Pacific Electric Railway holding in the Royal National Park, where an aromatic barbeque was the order of the day. With steaks and sausages appropriately accounted for, the lost thrill (for New South Welshmen) of riding on a tramcar was revived, with rides on many different types and vintages. For a number of the group, it was their first experience of a tramride.

With a good clean up and a change of attire we then assembled at the Hotel Australia for a dinner. This gathering gave us the opportunity of discussing some of the techniques and finer points used in the construction of the models (railway models) on display.

The after-dinner speaker was Peter Woolley who, contrary to all suggestions, did not speak about his recent trip overseas. The theme of his discourse was the future of model railways in Australia, the trend towards standardisation in our country, and the part that S.C.M.R.A. can and must play in developing and encouraging the modelling of Australian railways.

Also present at the dinner was Mr. Bill Spinks from the American Locomotive Company (Alco) who is in Australia to supervise the acceptance testing of two diesel locos for the Hamersley Mining Group. Mr. Spinks spoke briefly on some of the unique features of these locos, and also expressed his thanks for the invitation to attend the dinner, particularly as he had arrived in Australia only about 36 hours previously.

He also showed keen interest in the models on display, both rolling and coaching stock, as well as the steam and diesel locos although his main interest was, of course, in the diesel field. The prize winners were then announced.

Best entry: 1885 N.S.W.R. mixed train. Bill Dive. Roseville, N.S.W.

Steam Loco: 1st—N.S.W.R. 5407 (Goods loco). Howard Armstrong, Canberra, A.C.T. 2nd—N.S.W.R. Baldwin loco No. 294. Bill Dive.

Diesel Loco: N.S.W.R. 48 class. Robert Mepstead, New Lambton, N.S.W.

Coaching stock: 1st—N.S.W.R. Sleeping Car TAM. Howard Armstrong. 2nd—Vintage coach. Bill Dive.

Freight rolling stock: N.S.W.R. four-wheel cattle truck CW. Howard Armstrong. 2nd—Vintage assorted goods vehicles. Bill Dive.

Shunting contest: Rodney Tonkin.

Loco performance: PRR. ER15. Athearn rubber band drive F7. John Bevan, Edgecliff, N.S.W.

Despite overcast skies on the Sunday morning, the Wyong Wanderer, behind veteran steamer 3616, made a quick run to Strathfield, proudly wearing the S.C.M.R.A. emblem. The reasonable grades to Hornsby did not deter the mighty 'Pig' with the Geisel Injector which averaged 50 m.p.h. for that usually slow section. After a good run down to Hawkesbury River, a number of photo stops were provided, much to the consternation of some of the younger children on the train, who thought they had lost Dad.

On arrival at Wyong, some 63 miles north of Sydney, the train was backed into the relief platform, the loco uncoupled and turned on the turntable in readiness for the return journey some two hours away.

After satisfying the inner man, the goods yard and associated facilities were inspected, also a worm's eye view of the loco provided keen interest, as did the view from the footplate.

'All Aboard' sounded at 3.40 p.m. and three minutes later we were headed for home and, to the surprise of a number of intending passengers on the platform at Gosford, we literally flew through and were able to maintain speed around Mullett Creek, and attacked the Cowan Bank with great gusto. It was a much more pleasant ride than the motorists crawling along the Pacific Highway would have been experiencing.

Despite a fine effort in reaching Hornsby approximately ten minutes inside the tabled time, the run down to Strathfield was slow due to green over red all the way. However, this go slow was overcome until we were slowed down by a goods train from MacDonaldtown into Sydney.

The Enfield Loco Depot was almost deserted (except for the pigeons) on the Monday morning when the party again assembled for a tour of inspection of the facilities and the locos in various stages of repair and rust. The efforts of some organisations in preserving some old steamers was in evidence, and the colours of some locos certainly brightened up the generally drab appearance of the area.

After a hamburger lunch and some delay, we were honoured by inspecting the acceptance testing of the mighty units for the Hamersley project. These units are the largest and heaviest single engined diesel locomotives in the world, and to move them from the assembly plant of A. E. Goodwin at Auburn (Sydney) to Balmain for shipment to Western Australia, it will be necessary to lower the existing track in some instances, and in one particular cutting, the track will also have to be moved sideways to allow sufficient clearance. A number of modifications to the units will also be necessary to permit safe passage to the wharf.

During the load testing, the units were mounted on bogies from D57 Class tenders and consequently presented a very unusual sight. The diesel itself is rated at approx. 4,000 h.p., 3,600 being for the alternator, and the remainder for auxiliary equipment. To top off the units, they have been fitted with a good sized bell, which no doubt adds up to the weight of 189 tons.

A tired but happy group tendered a vote of thanks to the organisers of the convention, who had certainly arranged quite a full programme, despite some early discouragements and alterations to plans.

STEAM OR DIESEL?

When a steam loco. breaks down, it takes five minutes to find out why and five hours to fix it; when a diesel loco. breaks down, it takes five hours to find the fault, and five minutes to fix it.

Mr. Bill Spinks, ALCO.

PLANNING IN N SCALE

By PAUL VAN LEUVEN

As a result of my own eight years' pioneering experience in N scale I hope to bring new life to model railroading and try to pass on in a series of articles all I have learned, the hard way, from planning to the building of rolling stock and structures. I make no attempt to describe a particular layout or model, but give a general outline of what to do and what to look out for, thus you may be able to use the ideas to suit yourself. I will start by saying that this scale is ideal for using more prototype train operation and tracklaying methods, such as the use of transition curves, etc.

Those who try to reduce an HO plan to N scale will be very disappointed with the result. This is due to the fact that (and this is most important), a given track plan looks more and more toylike as you build it in smaller and smaller sizes. The best way is to start from scratch. If you do have to rely on reducing an HO plan, reduce it to a minimum of two-thirds and not half its size. This is rather difficult as you need to make adjustments of centre-to-centre spacing on double tracks and different turnout angles, etc., so it doesn't really pay to reduce a given plan.

We must make up our minds from the start whether we mainly use freight, passenger and freight, or mine and industrial traffic and whether we run trains from station to station or a round about trackage, or are satisfied with shunting operation in a yard.

The scale provides prototype length cars and the making up of a train would turn out longer than what we are used to in HO. Other factors force us also to use new methods in planning the layout.

If we have a station complex the overall size of the layout will be governed by the size of that station siding. Keep in mind that a 10-car passenger train becomes approx. 5 ft. 6 in. in length. To fit this in a siding the distance between turnouts at both ends should at least be 6 ft. apart. The overall length of the layout can be taken from experience as twice this length. This gives us an overall balance and allows return loops with reasonable approaches to and from the station. This is illustrated in a diagram, which by the way could be used for beginners. Section A and B are first jointed together and later extended by fitting in section C. Note that when section A and C are jointed together adjustments have to be made to the curves at the right-hand side of the station platform and use both radii of 18 in. instead of 24 in. and 18 in.

Get away from oval-shaped track plans unless both ends are at least 10 ft. apart, i.e., from the centre both ends are not seen at a glance.

A lot of straight track is also not recommended because it not only makes a layout uninteresting, but running trains over it soon becomes boring.

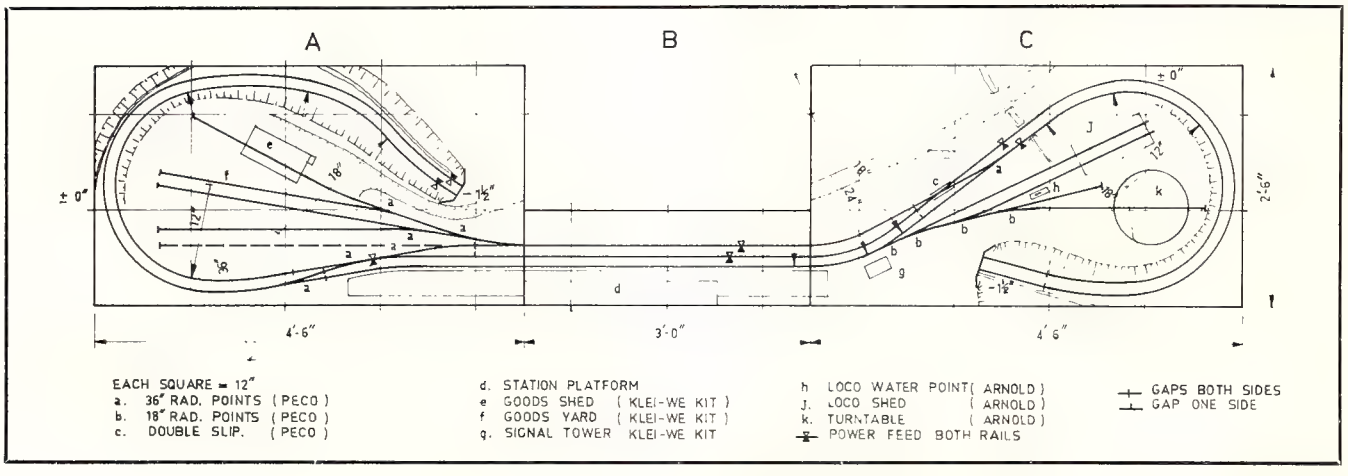
We should try to give the layout an atmosphere as if it were part of a large set up and give the viewer the impression that trains go on beyond. If a loop is essential and cannot be hidden it is best to disguise it by adding a factory or housing complex, or simply a large forest within the loops, so that we partially obscure the loop itself.

The height of the layout is another important factor, because the models are so much smaller they seem to be farther away and so the table top has to be brought up close to eye level. The lowest track thus should be at about waist height with a minimum of 42 in. off the floor. Then we should provide for several higher levels, away from the viewer. This helps to promote distance. If the distant terrain is at a high level and a railroad disappears behind a hill at this level, the wall behind it need not even have a backdrop as it will never be missed. The wall resembles the sky. Too often have I seen layouts with most of the track on an elevated road bed. Cuttings are just as plentiful on real railroads so why not have the real effect of the open country with rolling hills through which a railroad is laid with cuttings and fillings between hills? We should strive to get everything in the right proportion so that we appear to be looking at the full prototype scene. This will add much more colour to modelling. A simple test to see whether part of the layout looks all right is to view it with one eye through a 2 in. or 3 in. tube.

From the foregoing I see the potential in N scale. Imagine seeing a prototype length train rolling at scale speed through a countryside and following it for some time before it arrives at another station. It is as if we were watching the real thing with a bird's eye view. A big layout therefore adds more realism to this scale. Small details are not of such importance as is the overall correct shape and set up of everything. We can get away with leaving off such details as rivet heads, although they are still there on manufactured models. Making our own structures also adds more to the delight in our work. Almost any material can be used, from matchsticks for low trestle bridges to cardboard embossed with a hard pencil for buildings. The scope is endless and it need not cost much.

Other points to watch are: Trees are mostly seen in clumps and only here and there some odd ones are on their own. Paint only by daylight to get the best colour effects. The more distant a landscape is the paler the colour should be. Don't overlook bits of grass along the track that seem to grow wild and don't forget open ditches and drainage, which I have shown on the diagram. A mistake so often apparent on HO layouts is that tunnel portals and overhead bridges are too close together. This has too-cluttered an effect. Don't forget to colour the sleepers or sink them into the ballast.

For ideas on finishing touches I suggest you study the excellent article by I. Petherick in the March/April issue.



DEATH NOTICE

MODEL RAILWAY LAYOUT. Owner too complacent, good enough was not good enough. Was it you? At Rest, gathering dust and cobwebs.

Have you ever sat down and watched fish swimming around in an aquarium? There are never any collisions, no problems, no hitches—half an hour later you realise how enjoyable and relaxing it has been to just sit and watch things go smoothly. What about your layout? Can you just sit down at the throttle and operate ad-infinitum, or do you give up in despair after ten minutes or so of nothing but frustration? The most likely cause of trouble is the lack of motive in getting things moving; in other words, we are becoming too complacent.

Cannot understand why the loco keeps stopping, there has been no one running it or doing any maintenance for months.

Over near the flour mill there is an uncoupler—but it has never worked since it was placed on the sleepers. I should really find out why.

Meant to tidy up the wiring the last time that happened—now the whole layout will have to be rewired.

Platform buildings are not really necessary, you never see any intending passengers waiting for a train.

Logical running of trains is strictly for the fanatics. Why should I run my railway anything like the prototype?

Always have derailments at that crossing, so annoying too—I usually manage to knock over some rolling stock or scenery when stretching to lift the derailed train.

Controller is not the most reliable, the handle keeps slipping and instead of slowing down when it should, the loco goes flying off the track on the curve.

Every time someone asks if I have finished the trackwork, I hope they don't come over to see it.

Never think of maintenance on the locos; why worry about clean wheels and pick-up contacts?

Certainly don't get much enjoyment out of my investment—sell it?—No, next weekend I'll forget the football and concentrate on cleaning up my "empire".

Yawn, maybe next time.

Make your motto:
"Only the best is good enough.
Good enough is not the best."

NEXT MEETING ?

READ CLUB CAR

WHY AN ASSOCIATION?

What is an association? A group joined together in common interest or purpose; a society formed for promoting some object.

Is an association also a club? No. A club is formed for social activities where possibly some modellers do not have the facilities for constructing a layout on their own, but can join others, and with their combined efforts, they can have an operating layout. Also, the social fraternisation can be of benefit to modellers from a domestic viewpoint—if wives and families get together, a more lenient attitude towards dad's pastime could result. An association provides services and information to members which would be difficult and/or costly to obtain as an individual.

Why have an association for model railwaymen? Consider for a moment if you worked in the Research and Information of the N.S.W.R.; and over a period of six months received over 200 letters from modellers requesting information relating to a variety of subjects. Obviously, time and funds are limited, and not all of the required information can be supplied. However, guided by the pattern of information wanted by members, the association can approach the authorities on their behalf, and usually obtain this information and supply it to ALL members at minimum cost to the authorities and the association. Further, with such a variety of occupations amongst the members of the association, many questions and problems can be answered or solved without having to contact any other authority, thus fostering good public relations, by only going to them when the resources of the association have drawn a blank.

In addition to this, there are some fellows who by nature are not socially inclined, and others who by reason of irregular working hours or remoteness of living area, cannot participate in, or join a club; but they do have a desire to belong to someone or something without the obligation to attend regular activities.

What benefits are offered by the S.C.M.R.A. to members who do not live in densely populated areas? There is no discrimination against association members who live in isolated areas. The association anticipates holding annual gatherings in different States when all members can get together to swap yarns, see other layouts, visit places of railway interest, and possibly arrange a train trip out of the ordinary. In the closer setttled districts, regular meetings are held which give members the opportunity to ask for help in some matter, or show off some item which has been constructed or modified. If you happen to be travelling around the country, you might care to call in on some fellow modeller and either make new friends or renew old acquaintances. Another plan which the association anticipates will be implemented in the near future is the preparation and issue of a directory of all members of the association listing names, addresses, scale of layout, and where to contact if desirous of visiting.

What provision has been made for club activities within S.C.M.R.A.? Where 10 or more members living within a geographical boundary are desirous of forming a sub-division of the association, they can do so, with the approval of the Executive council. They would be required to nominate one member to represent them on the Council. If a group layout is built, it automatically becomes the property of the association—it would be rather awkward if Tom Mix moved out of the State and wanted to take a section of the scenery, or the marshalling yard with him.

Motive power, rolling and coaching stock, however, could remain the property of the individuals, providing that some arrangement was made to ensure that there were always some 'wheels' for operation. Members of established clubs can join S.C.M.R.A. as individuals, or the club itself may apply to the Council for 'Sustaining Membership'; i.e., for the payment of a nominal fee, the club would receive one copy of all the membership material supplied to individual members.

Are there any restrictions on the type of equipment used on members' layouts? No, whilst the association encourages modelling local prototype, there is absolutely no discrimination if you model any other railway system, none at all, or even just purchase that equipment that is sometimes sold as toys.

We hope that all the above questions have been answered to your satisfaction, and should you have any other questions regarding the Southern Cross Model Railway Association, then don't be afraid to write to the Secretary.

"So you think you are a good driver, do you?" This question is heard quite often on television in Sydney, in an attempt to educate motorists in some of the "not so well known" rules of the road. If we claim to be the big chief behind the controller of the layout then we must know the most economical and speedy method of making up and setting up a pick up goods train. If you think you have a layout that lends itself to a shunting operation, then send a sketch of the track plan along with a "problem" to the editor, and we will put it to our readers in subsequent issues.

35mm. TRANSPARENCIES
of West. Aust. Railways—STEAM & DIESEL.
Over 100 of STEAM ENGINES (some long since gone). Over 100 of Rolling Stock, Diesels, Locations, etc. Duplicates 45 cents each (posted), $2.40 for 6 (posted). Send stamp for Listings to:
JACK STANBRIDGE'S **"HOBBY SHOP"**
54a Canning Highway, Victoria Park, Perth, 6100 Western Australia
"Home of the Trains". Supplying good quality Model Railways.

General view of yards.

THE DETA WESTERN RAILWAY

by Ted George

Our model railway here in Darlington, Victoria, is built in a 20ft. x 12ft. workshop and is run as near as possible to the G.W.R. near my former home in England. Like all model railways it grew from a small circle inside the house until it was moved to its present location. Though formerly built around the walls we have adjusted things to allow a gangway along one side to permit visitors without them interfering with the running.

A hump marshalling yard was constructed to minimise the shunting of empty wagons. This is of value as often two or three trains are waiting to be cleared. At present industries are a butter factory, a silo and a biscuit factory. A meat works has to be constructed soon to cope with the number of livestock on the surrounding farms.

Added to these are the general goods which are needed by the community of the as yet unnamed country town. The selection of the industries was governed by the available rolling stock; the closed vans can be used for biscuits or general goods, and the refrigerator van can be used for butter and dairy products as well as meat.

The open wagons are used for anything which cannot be carried by the other stock.

When the meat works open more cattle trucks will have to be purchased. At present we are awaiting the arrival of 5 bulk wheat trucks and then the silos can come into operation.

Most of the buildings are scratchbuilt to the scale of 4mm to the foot, though some HO have crept in. Another engine shed had to be built to accommodate the growth in the number of locomotives. We stick to steam but a diesel shunter had to be purchased to work the lower end of the hump yard when a steam loco was not available.

Our trees are made by cutting a silhouette out of stout cardboard with foam plastic glued on leaving small spaces for branches. They are then sprayed with green paint. The branches and trunk are then picked out in brown paint.

WANT TO HELP THE MIGRATION PLAN?

Alan Johnston, president of SCRMA, forwards the following photograph and letter for publication for the information of readers.

Dear Mr. Johnston,

Let me introduce myself to you firstly.

I'm a Switzerland boy at the age of 18½. My occupation is watchmaker and my hobby is model railroad with steam engines of the USA in gauge HO. I'm NMRA No. 8533.

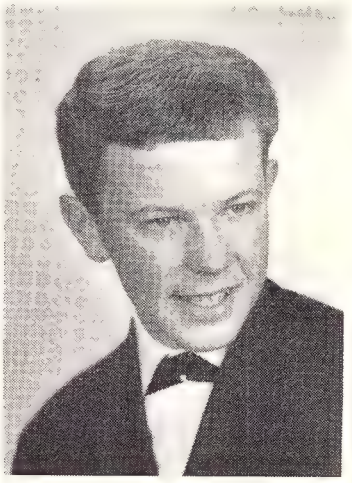
Now, I have in view to emigrate for Australia in 1969 (May-July). But I have no friends in Australia.

I want you to ask your Model Railway Club whether you have a model railroad man (or woman) to write letters friendly? Over Railroad (in Switzerland and Australia) and many others; I am so glad to make his (or her) acquaintance.

Mr. Johnston I thank you very much for your trouble and I greet you.

Railway-friendly,
PETER W. OETTERL

Kilchbergstr. 25
4800 Zofingen/AG
Switzerland.



CONVERTING EQUIPMENT IN N SCALE

Reprinted from N Gauge News

Whilst there is a lot of U.S. style equipment available on the market, it often comes about that some special item is required. One item often asked for is a wood sheathed caboose. This is possibly one of the easiest items to convert.

Take the caboose of your choice, but I have found that the Trix, Atlas and Sekisui ones are the best. In the latter you can purchase the undecorated item.

Remove the paint and then the rivet detail. This is best done with an Exacto knife with sharp blade. Using the blade crosswise, carefully scrape the rivets off. Continue till you get a smooth surface. The finest of fine glasspaper will give a fine flat surface after this operation.

In the case of the Trix caboose leave the sill rail in position. Do not in any of the vehicles remove the window frames.

The next step is best done after removing the body from the chassis. With a set square as guide, scribe in the planking. Remember this scales out at 3in. which is approx. 1/50 of an inch.

At this stage you may have some difficulty with the battery boxes interfering with the square; if you use a carpenter's square, you will find that the blade is clear of the handle and will overlap the box. This should be of sufficient depth to enable you to use it from both ends.

For scribing, I have found that the back of the point of the Exacto knife blade is just right. When you have finished scribing, a coat of Floquil will give you the excellent colouring medium required. Letter for your favourite road. Here you have a piece of equipment that is different from anything on the market today.

In a similar way box cars and reefers can be aged. There is nothing in the way of maintenance cars available or projected in the near future. These can be easily made by scribing in a similar manner to the above. Windows can then be cut in the desired locations. If a frame is required this can be cut from heavy paper and cemented around the opening.

The easiest way of making openings in the plastic sides is as follows. Mark out the window locations and scribe with a modelling knife. Take a drill slightly smaller than the narrowest dimension of the window. Scribe diagonals to locate centre point.

Pop or hole with a knife at the intersection to provide a drill location. Carefully drill a hole at this location, making sure it does not run over the scribed lines.

Take a square file that will fit the drill hole and enlarge the hole to the scribed lines. A file with coarse cut is the best for the job. Make sure it stays clean, or it will not remove the plastic. If you are not confident in the filing technique, practice first on a scrap piece of sheet.

There are very many ways in which a standard car can be made into some other or unusual piece of equipment.

Using sheet plastic, gondolas can be provided with a cover and be made into newer type of equipment. Flat cars can have all styles of additives to make them into special purpose cars. Rack ends, cradles for various goods, tracks for piggybacks to mention but a few.

Doors can be cut in cars and backed with sheet scribed as wooden doors. This can be in the form of personnel doors or larger freight car doors. Steel box car doors can be sanded flat and scribed on the face to represent wood doors. With a little thought many possibilities present themselves. Have a go. You may not succeed first time but you will find it fun.

NEW CARRIAGES FOR *THE OVERLAND*

Two additional air-conditioned twinette sleeping carriages have been provided for **The Overland,** Melbourne-Adelaide and Adelaide-Melbourne passenger-train services.

The Overland, and its predecessors, have provided a nightly service between the two cities for over 80 years.

These popular twin trains were built at the SAR Islington Workshops, and are jointly owned by the South Australian and Victorian Railways. Each evening, one train leaves Adelaide at 7 p.m. C.S.T., with the other train leaving Melbourne at 8.40 p.m. E.S.T.

Roomette or twinette sleeping accommodation is available on **The Overland.** The popular roomette is designed for single occupancy day or night. A twinette has the same facilities but, to accommodate two people, the cabin is much larger.

Twinettes have their own hot and cold shower enclosed in a separate annex.

A new breakfast service was introduced last year. The complimentary tray breakfast gives a choice of four fruit juices, with buttered toast and honey or marmalade, fresh fruit, and tea, coffee or milk.

The Overland has always provided the ultimate in modern travel comfort. In the new carriages, the SAR Workshops introduced new materials and improved many of the amenities already available to passengers.

Particular attention was given to the stowage of luggage. Ample luggage space, easily accessible, has been provided in the new twinettes by redesigning the spaces above and underneath the seats. Plenty of luggage space is necessary as the free luggage allowance for passengers on interstate journeys is now 168 lb.

The middle of the seat in each compartment folds back when the conveniently located table, located in the centre, is required.

A comfortable, pull-out seat is available when the lower bunk is made up for sleeping.

Many new developments were incorporated in the construction of the carriages. The shower compartment floor, for instance, is now of fibreglass, moulded in one piece at the SAR Islington Workshops, and laid over a solid cork foundation.

A better carriage walk-through design was adopted, and carefully selected laminated panelling is responsible for the warm and cheerful atmosphere of the new carriges.

The impressive sleeping carriages of **The Overland,** with their distinctive fluted sides, have always been given aboriginal names instead of the prosaic serial numbers.

Some of these pleasant-sounding names are Allambi, Tantini, Purpawi and Weroni, and their meanings are very appropriate: peace, quiet, slumber, etc.

This tradition is carried on—the new carriages have been called Tawarri (evening breeze) and Yanki (walkabout).

The Overland also carries first and second-class sitting passengers in comfortable, air-conditioned saloon cars.

A GUIDE

for the PERPLEXED...

MODEL RAILROADER

THE EVER-GROWING NUMBER OF SCMRA

DATA SHEETS

JUST ANOTHER REASON FOR MEMBERSHIP IN SCMRA

Here's a prototype station plan that anyone can model. It is simple in its layout and being the terminus of a short branch there are endless possibilities in the variety of goods that can be carried to and from the town.

OBERON

The Oberon line branches from the main western line of the N.S.W.R. at Tarana and on the way to the terminus the builders seem to have gone over or around every hill in sight. This gives a very good line from which one can build a model. With curves as sharp as 5 chains radius (complete with check rails) the rails are laid on uncompensated grades as steep as 1 in 25. Prototype operations are therefore very difficult to say the least.

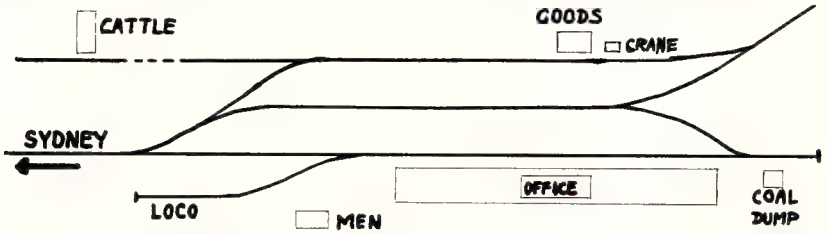
Prior to March 1963 the line was worked solely by 19 class 0-6-0 locomotives (see plan Aug./Sept. 1965 issue). The traffic offering could have benefited by larger machines but the curves kept these small engines kings of the Oberon line until someone introduced a 49 class diesel.

General goods, probably carried in S trucks (plan Mar./April 1968 issue), and stock used to account for the goods section of the daily mixed. However, about the time of the advent of the diesel the vast CSR Company built a Pyneboard factory in the district. This gave the line much additional traffic.

On at least one occasion the "goods", which normally ran only if there was too much work for the "mixed", made five trips in one day to move the tonnage offering from the factory.

Since the 49s started both 45s and 48s have served the line. Main line diesels are quite a step up from the old 19 class steam locomotives. Naturally steam lovers mourn their passing.

So if you wish to create more traffic on the line to Oberon all you need do is to purchase a sheet of Pyneboard so that you can build a model of the line!



OBERON

REMEMBER

MODEL RAILWAY WEEK

BRISBANE, NOVEMBER 10-17

MAGNIFICENT 35MM. SLIDES OF QUEENSLAND NARROW GAUGE CANE LOCOMOTIVES

No. 197 "VALDORA"

Pictured above is one of eight colour slides available of the steam locomotives which over the years have hauled the cane trams in the Nambour area of Queensland. Some of these locomotives have now been retired and pictures such as these will never again be available. All lovers of narrow gauge locomotives should have this collection of fine pictures.

Slide No. 190 "SHAY"
Slide No. 191 "BLI BLI"
Slide No. 192 "COOLUM"
Slide No. 193 "EUDLO"
Slide No. 194 "MAROOCHY"
Slide No. 195 "MORETON"
Slide No. 196 "PETRIE"
Slide No. 197 "VALDORA"

Prices:

Set of 8 $3.30 posted.
Single 45c posted

TRANS-AUSTRALIAN RAILWAY MEDALS 50th ANNIVERSARY 1917-1967

These beautiful medals are now available in bronze, silver and gold. A limited issue only is being made and the silver medals will be serially numbered. Each medal is supplied in a deluxe plush case with suitable inscription in the lid. The medals are 1½in. in diameter.

Prices:

Bronze: $4.00.

Sterling Silver: $10.00.

Gold: Price on application.

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RAILROAD BOOK COMPANY OF AUSTRALIA

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Mail Bag

Sir,

In answer to your recent request in the Jan./Feb. issue of your magazine for information regarding the cover photo of the Shay; I think I might be able to provide the answer.

In "Along the Line in Queensland" (Traction Publications) on page 39 a photograph appears of a Shay which very closely resembles that of your cover photo, in fact I am of the opinion that it is. The script beneath reads, and I quote:

"If 2 ft. gauge line, one of very few not built primarily for the sugar-traffic was the shire-owned Mapleton Tramway which ran to the town of that name over tortuous gradients from Nambour on the North Coast line of the Q.G.R. At Nambour there was physical connection with the cane tramways of the Moreton Central Mill. On the closure of the Mapleton Tramway the Shay-geared loco here seen at Nambour (photo in book) on New Year's Day, 1943, was sold, together with a sister engine, to the mill." The photo of the engine in "Along the Line in Queensland" has had the top of its bell chimney removed while your photo of the engine still possesses its top half. So it is possible that these are photos of the two different engines. I hope this throws some light on the subject.

ROBERT G. BASSETT.

Sebastopol, Vic.

Sir,

I have recently purchased the Jan./Feb. issue of your magazine. I congratulate you on the magazine and find it very interesting, particularly as advertisements show Australian prices.

My model railway is a carpet set in O gauge, 12 volt D.C., centre third rail. It hails from pre-war and is English prototype rolling stock. I have recently acquired a Tri-ang Big Train Loco "Blue" and I was told it is a fairly good model of one of British Railways diesel locos.

Could you please tell me which one it is and what is its correct colouring and where a photo of the original is obtainable. I plan to fit four motors one on each axle.

The photo of the small Shay loco on the cover (Jan./Feb.) immediately caught my eye. A member of the Model Engineers here is making a 3½" gauge model of this loco but only has a photo (not your photo) to work from.

If you can locate any drawings or clearer photos of the running gear could you please let me have them, or a copy of same, or where they can be purchased?

Thirdly—do you know of any firm which sells Hornby O gauge parts, such as driving wheels, in Australia? Is there any firm which sells O gauge equipment or rolling stock after the Hornby system? I have not seen any Japanese items in this gauge. I know you can obtain the high priced material and rolling stock, but I had in mind something of a more general style like Robilt. I cannot buy this in W.A., if it is still made. I would be interested to learn of anything like this which is available in Australia.

I was pleased to read the O gauge article in the December magazine and regret the passing of the author. I hope you can help out for which I shall be much obliged.

RALPH KEAY.

Bayswater, W.A.

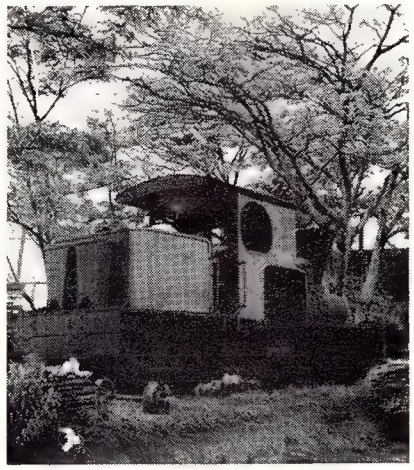
Sir,

Re your enquiries about the photo of the "Shay" locomotive on the cover of your January-February issue. I think it is one of two two-foot gauge Shay locomotives which worked out of Nambour, Queensland, to the Blackall Range on the old Mapleton Tramway. The line ran from the Moreton Central Mill under the North Coast line to Mapleton traversing 1 in 19 grades and curves down to 48 ft. radius. The line was shortened considerably in 1944 and is now a few miles long. It was operated by the Shire Council.

The two Shay locomotives weighed 14 tons and had two 6in. x 10in. cylinders which made them a very small "Shay" locomotive, possibly one of the smallest "Shays" ever built. The "Shay" pictured in your photo is a very small one certainly no bigger than 2ft. 6in.—probably 2ft. gauge. The "Shay" in your photo has also a "cane loco" type coupling on the front.

The water tank in the background adds strength to my story as I have seen a water tank like this in other photos of Moreton Central Mill.

The fate of these locos is that they were rebuilt into one "Shay" loco in about 1946 and the result is now preserved in the mill yard. Enclosed is one of my photos of that engine. It



has a different cab and funnel which are things that can easily be acquired particularly during rebuilds.

Hoping this has been of assistance to you.

KEVIN W. TAIG

Ashburton, Vic.

Sir,

Since the article on the N.S.W. 36 class engines was compiled, some important changes have been made, concerning the use of these engines.

As at mid-1967, only about a dozen 36 class engines were still in service, but, only a short time later, all were out of traffic. Due to the dieselization of the Western Division, and a Union ban on the working of the "Pigs" on pick-up duties, the remaining members of the class were hastily withdrawn; the last two of these 4-6-0's in service, 3612 and 3641, being withdrawn from traffic in October and November, 1967, respectively.

The numbers given as "in service at August, 1967" should not be taken as the only ones still in existence, as there were many changes in individual locos in and out of storage around this time. Many of the 36 class are waiting cutting-up as scrap at Enfield, but ten have been placed in temporary storage as trafficable engines. Locomotives concerned are: 3638, 3642, 3643, 3644, 3645, 3647, 3651, 3652, 3654 and 3664.

During January 1968, 3638 was taken into Eveleigh Workshops for modifications, which involved fitting of Franklin Power Reverse gear. It emerged in early February, and underwent severe trials before any decision to modify additional units in this way, was made. The trials have proved extremely successful, and 3638 is now allotted to general Southern line working from Sydney to Goulburn. Recently, 3644 and 3651 entered Eveleigh shops for similar modifications, but these two units will be fitted with rear sanding equipment for tender-first working. The Franklin Precision Power Reverse equipment for these conversions is coming from scrapped C.38 class 4-6-2 locomotives, although it is believed that the equipment placed in 3638 came from one of the 58 class 4-8-2's in the 5814-5825 series; these twelve "Mountains" were never completely assembled from the parts supplied, and did not ever run in traffic.

Locomotive 3636 is of course still in existence, being allotted to Enfield, but it is only used on rail fan excursions, as required. Work on the restoration of 3609 ("Hawkesbury") is nearing completion; this engine is due for static display in the Enfield Rail Museum.

PAUL ROGERS

Doonside, N.S.W.

Sir,

In reference to your editorial in the Jan./Feb. 1968 issue of The Australasians, not all Americans think like the NMRA brass, especially in the matter of international relations. My good friend, Paul Shimada, a Past President of PCR shares this view. We have been and are doing our best to help the British Region get the National Convention in 1971.

If you know of any model railroaders coming to the States tell them if they come through Sacramento to contact me and I will show them around—Model Railroading "O" and "HO", standard gauge Southern Pacific, Western Pacific and Sacramento Northern.

EARLE J. LEIGHT.

Sacramento, California, U.S.A.

Muy Sr. mio:

Adjunto le envio 18/-libras Esterlinas para mi suscripcion a la Revista Australasian Model Railroad por un ano.

Tambien quiero darle las gracias por su extrema amabilidad y simpatia, y como Vice-Secretario que soy de la Asociacion de Amigos del Ferrocarril de esta Ciudad, le prometo que le enviare algunos articulos para su Revista.

Sin otro particular y en espera de sus amables noti cias, le saluda afectuosamente.

JULIAN PALMERO

Bilbao, Espana.

Sir,

I recently read through a copy of a "magazine" printed by the Flinders Model Railway Society here in Melbourne, and a number of thoughts have been running through my mind which perhaps you may be able to settle for me. You may wonder why I am writing this letter to you rather than direct to the society, but I feel that as your publication has set a magnificent standard for model railway enthusiasts, then you should be in a position to give an unbiassed reply to my questions.

1. As I have previously seen many of the names mentioned in early issues of AMRM associated with the old SCR of NMRA, is there any connection between the SCMRA and the Society?

2. If the answer is "no", then in view of the recent incorporation of SCMRA, and the advantages offered by such an organisation to modellers as individuals and clubs, it seems rather foolish to not "hop onto the bandwagon" and join in an established organisation which is striving for a better deal for modellers in Australia.

3. If the answer is "yes," then why do they go to the bother and expense of printing their own magazine which does have some useful information to modellers in general as well as purely "domestic news", when they could contribute to your magazine which has become accepted as the voice of modellers in Australia. This would then help them to "show the flag" as well as show to manufacturers that modellers throughout our country are keen to follow local prototype railways, as well as show that we are a united group rather than a collection of individual little groups and in some cases cliques.

P. DALLY.

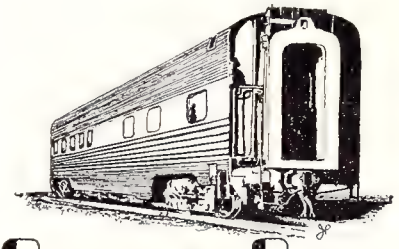
Ferntree Gully, Vic.

Sir,

Having attended the Sydney Convention at Easter, I would like to express my thanks to those who were responsible for organising the various activities. I don't know whether it was intended or not, but rather than remain at home with the children while my husband attended the convention, I accompanied him on the outings and was not bored in this apparent man's world. Also, I can now converse more intelligently with my husband and his friends in the association. Congratulations again to those who organised a wonderful week-end's activities.

MRS. B. CARPENTER.

Lakemba, N.S.W.



CLUB CAR

SCMRA NEWS

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Secretary: TERENCE N. CARPENTER, P.O. Box 107, Lakemba, N.S.W. 2195.
ALL CORRESPONDENCE SHOULD BE ADDRESSED TO THE SECRETARY

SCMRA MEMBERSHIP DUES

For your convenience, dues may be paid into any branch of the Bank of New South Wales and remitted to Penrith, N.S.W. in favour of the "Southern Cross Model Railway Association" using a *Savings bank cheque account* deposit slip. The deposit slip with your name on reverse side and/or correspondence re membership should be sent to the following address:
The Secretary, P.O. Box 107, Lakemba, N.S.W. 2195.
Joining Fee $2.00. Family Member $1.00. Regular Dues $4.00 p.a. Sustaining Member $10.00 p.a. 5 Years (lump sum) $16.00. Cheques, money orders or postal notes should be used and made payable to "SCMRA".

SCMRA Executive Council Report

At the NMRA Board of Trustees meeting on March 2, it was agreed unanimously that an amendment be made to the NMRA By-laws and constitution stating that "any duly constituted legal entity interested in Model Railroading may become affiliated with the NMRA under regulations set forth in a charter granted by the Board of Trustees." Endorsement of this motion will be asked of all NMRA members in the 1969 ballot.

The Board considered, that in view of the desire expressed by many modellers in Australia for their own independent association, the problems of Southern Cross Region of NMRA could be overcome by anticipating this motion and granting Southern Cross Model Railway Association a charter of affiliation.

The agreement contains much legal phrasing, which will not be reproduced here. SCMRA and NMRA members will find it reproduced in their Bulletins and Boosters. Stated simply, the SCMRA will receive for reproduction and distribution to members copies of all standards and the data sheets, plus any other items which the executive thinks will be of use to modellers in Australia. Similarly all SCMRA data sheets will be supplied to the NMRA. In exchange for this, SCMRA will copyright all NMRA material in Australia and will service NMRA members in Australia. Therefore SCMRA members will receive all NMRA information without having to pay dues to that body.

This is an honour for SCMRA, to be permitted to be the first affiliated organisation of NMRA, and it is the hope of the Executive Council that members will assist us to make this agreement one of which we can be proud.

EASTERN DIVISION

Future meetings are as follows:
June 15: Brian Fowler, 11 Pearce St., Baulkham Hills.
July 13: Ian Mountjoy, 6 Dumeresq St., Gordon.
August: Place to be decided.
September 14: Ellis Eyre, 76 Noble St., Hurstville.
October 12: Bruce Thomson, 17 Patricia St., Westmead.

OTHER CLUBS

CANBERRA MODEL RAILWAY CLUB. Secretary: F. Holloway, 58 Jansz Crescent, Griffith, A.C.T. 2603.

Twenty members were present at the meeting held on 3rd April at John Russell's home.

Progress on the Club layout was discussed, and reports from the scenic team, under the control of Bruce Block, and the per-way team, under Howard Armstrong, indicate that the replanning of the scenery and the track re-alignment project are progressing satisfactorily.

The Secretary reported that the Canberra Public Library operates a Group Membership Scheme which allows greater use of library facilities to groups participating in the scheme. It was decided that we should apply for membership.

A great deal of interest was created by a letter from the Melbourne Model Railway Club concerning their projected International Convention of Railway Modellers to be held in conjunction with the 1970 Moomba Festival. We are eagerly awaiting further details as planning proceeds.

The meeting held at Tony Payne's home on Wednesday, 1st May, was attended by 15 members. Due to the imminence of mid-year examinations our junior members were not in attendance.

Bruce Block, our chief scenic artist, reported good progress on the scenic aspect of the club layout. Paintwork is now completed in one area and members are requested to concentrate on the making of trees since we will need quite a lot for the country areas.

Howard Armstrong, our chief tracklayer and electrician, advised that track wiring will be completed this month (work permitting) and test running will then commence.

Later in the evening Howard gave us a resume of the activities of the Model Railway Convention which was held in Sydney over Easter. It seems by his account, that those who did not attend missed a wonderful time. Howard took out the prizes in the five sections of the model competitions he entered and won second prize in the loco performance tests. We congratulate him on this fine effort.

Our meetings are held on the first Wednesday of each month and visitors are always welcome. If you are planning a visit to the national capital and would like to meet us, a call to our Secretary on 9.1807 (home) or 4.0411 extension 393 (work) will be all that is necessary. We will do the rest.

THE AUCKLAND MODEL RAILWAY CLUB INC. Secretary: P. Burch, P.O. Box 2573, Auckland, New Zealand.

The annual general meeting was held on 3rd April, 1968, at 8.45 p.m. The President, Mr. J. Boyes, welcomed members to the meeting during his opening address and the minutes of the 1967 meeting were read. Reports from the secretary were presented. The secretary said that eight new members had joined in 1967 and that membership of the club was now 32. The President gave an outline of future projects to be undertaken by the club. The annual subscription was fixed at $3.00 and members are reminded that their subscriptions are now due.

It was announced that during the year a top modeller competition would be held and later in the year an auction.

Member R. Collis was congratulated on winning first prize for his scenic model at the recent convention as also was B. Lilley for gaining first prize for his 3/16th scale G class N.Z. Beyer-Garratt in the locomotive competition.

Election of officers for the ensuing year resulted: Patron: W. W. Stewart; President, J. Boyes; Secretary, P. Burch; Committee, P. Baker, K. Agnew, R. Ashby, D. Wills; Library, A. Halling; Editor, R. Scholey; Auditors: J. Yolland and E. Burns.

UPPER BURNETT MODEL RAILWAY CLUB. Secretary: Clive F. Morgenstern, Monto, Qld. 4630.

During recent weeks club activities have been concentrated on operation of the O.H. & E. and some of us have become quite expert at carrying out shunting operations.

A card system has been introduced to determine the various destinations of wagons. Although quite simple, this system provides an endless variety of train movements. Wagon numbers are written down, cards are drawn and the destination indicated noted against the wagon numbers. Train requirements are determined by the loading to be moved. Maximum load (as determined by passing siding length) is 12 vehicles plus loco. At times, due to location of wagons, very little loading has to be moved from Upburn and a lot from Oyster Hill and this necessitates engine and caboose running.

Recently, someone accidentally shuffled the cards midway through a drawing and, as a result, an excessive number of wagons was consigned to one particular destination—chaos! Eventually everything righted itself; but trains were very, very late.

Yard shunters have little time to spare as trains are marshalled and industrial sidings shunted. A shunt engine is assigned to Upburn yard; but road engines do their own shunting at Oyster Hill. The loco depot is at present located at Upburn; but a second one will be located at Trestle Bay when tracks have been extended from Oyster Hill and the yard constructed at Trestle Bay.

Construction on this second portion, though impatiently awaited, has been postponed until after the Monto Dairy Festival in June. As in previous Festival years (1964 and 1966) the club is conducting a Model Railways Exhibition as a part of the Festival. This year the display will be open on the night of Thursday, 6th June, Friday night (7th) and on the Saturday both during the morning and again at night. These Exhibitions have proved very successful in the past and we are hoping this one will be even more successful than the previous two. For the first time we will have four scales represented—N, TT, HO and O, TT being the newcomer.

Unfortunately our very popular Vice-President, John Lebsanft, has been transferred on promotion to Gladstone. He will be greatly missed as no one has done more for the UBMRC than John. We wish him all the best in Gladstone and express the hope that he will find the time to visit us regularly, and to sit in on operations on the Oyster Hill and Eastern whenever possible.

(Continued col. 1 opposite)

NOTES OF THE SYDNEY MODEL RAILWAY SOCIETY

With a half year already reached the Society has entertained several visitors from interstate and elsewhere but the usual interest coming from the operation of the O gauge layout has been missed by many due to the rehabilitation of the third rail on this system. Some restriction of operations on the HO layout have also occurred resulting from the welcome if interrupting work being done by Denis Sherring on the new and complicated control board and wiring therefrom at Junction.

All members are reminded that annual subscriptions are due and if any have still to pay their accounts their early attention is requested to this obligation. No reminders are now sent by post so it's up to individual members to act without further notice.

"O" GAUGE NEWS

Since the beginning of the year "O" gauge has been at last given a face lift. The scene at rear of Delec has been placed on the back wall which now shows up Junction new panel board on which John Alexander has been working. The old 3rd rail which was brass wire has just about been replaced by HO rail giving a much neater look. Point blades and crossing frogs where needed were replaced or repaired together with general overhaul of the tracks. Your reporter has not been present as much as he would like, what with personal matters and sickness, but from what I have seen, many thanks should be extended to the men who have done the work. Much of the 3rd rail and wiring has been in use since the layout was opened some 20 years ago. So after this overhaul it should last out the building. Many thanks fellows—no names are given as I may miss someone and then I would be in trouble.

By the time this issue is printed everything may be finished and I think that some form of ceremony should be held after this work is completed. As was stated elsewhere it could well be another 20 years before this kind of work is required again. What do you "O" gaugers think of this?

Barry Millner has told me that he was thinking of a new timetable to come into effect on completion of overhaul work that is now being done. In theory it should be easier than the present one and perhaps members will not become as confused when operating Junction or Medway alone. For some unknown reason they become confused so with a new timetable things may work out O.K. once again.

"HO" GAUGE NEWS

Some of the highlights which have added interest to regular meeting nights (every Monday except holidays) has been the appearance of new locomotives and other items. Among these has been Ken Smith's Triplex 2-8-8-8-2 recently painted black by Arthur Wheatley who is a genius at getting that dull off-black toning that full size engines acquire after a few days in service. Some thought it appeared shorter than when in the natural brass but there's no doubting that this massive loco looked more powerful and business-like. Ken also showed his latest contribution to his NSWGR suburban electric set. This is a converted Tri-ang NSWGR car which has been altered from the double to a single door type. It is a driver's trailer car which, with another motor car he is working on, form the two-car sets to be seen on the Hornsby-Cowan and the Clyde-Carlingford lines.

An absentee greatly missed lately has been Arthur Wheatley, easily the Club's most prolific and original modeller. During one of his few nights off a heavy business overtime chore he produced 24 LLV's which, with some others he had already donated to the Club, made up an impressive train when operated behind Denis's two NSWGR diesels—a 42 and a 44 in new resplendent gold and maroon uniform of the originals.

Another excellent paint job performed by this member was on three locos for Bill Galloway also a Tenshodo NYC Hudson for Barry Millner which has had the tender shortened to fit the system's turntables. Both members have left these locos for rostering into the regular timetable which is being revised by the latter with the purpose of extending the shunting operations to make use of the various industrial facilities at the various stations on the layout.

Two new members who have been welcomed into the Society on the HO side are George Wells and David Glendenning. Dave is Lionel Glendenning's son and Lionel is the Vice-President HO, so Dave was at home at once. Dave is a fireman on the NSWGR now working on diesels but has had his share of work on the big 60 Garratts and most other classes on the NSWGR . . . a good man to have when it comes to discussing the authenticity of some of the gossip and also the gadgets to decorate model conversions in the diesel loco field.

Concerning new members they might be interested to learn that the HO layout conforms to the following standards for rolling stock, etc. —couplers, Mantua originals with loop 11/32in. above rail; wheels, back-to-back measurement—14.5mm and all wheels insulated; vehicles either 3.5 or 4mm (3.5 almost wholly) and preferably NSWGR prototype locos and rollingstock.

Lionel has also prepared nameboards for all stations and some stations have now been color coded in anticipation of additional freight shunting movements under the new timetable. Central is red, Witts End white, Glenvale yellow, Valley blue and Plateau green. The newly installed main line to Glenvale which by-passes Witts End is to be called the north-eastern main and now the operator working the Junction control board has to work as if demented coping with traffic converging from four separate main lines and that coming from Central station and Central freight yards. As none of the boards are simple to understand without a lot of practice the policy of the club in future will be to let new members sit alongside a veteran operator on the one board until he has grasped the workings of it.

A lot of other incidental news will be held over for next issue, but we must record our pleasure in seeing Frank Maxwell coming in more regularly, and the appearance of Bob Brewer and Max Burke and a full roll-up is required regularly to man the HO systems 10 control boards, provide a supervisor and a roving repairs man. Come along laggard members.

CLUB CAR (cont.)

FLINDERS MODEL RAILWAY SOCIETY. Secretary: Keith A. Nelson, 580 Blackburn Road, Mt. Waverley, Vic. 3149.

Auction day 2nd March was held at Ray Hiho's. Ray is building a layout in HOn3 which is coming along very nicely.

At the home of Chas Huggard 6th April members had their chance at trying their hand at some hard shell scenery on Chas. layout under the watchful eyes of Phil Jeffers and Laurie Jackson.

Burks in Melbourne have asked the club to put on a show case display of models built by club members during the school holidays.

Meetings will be held at the following members' homes:

5th July: Jim Blaney, 21 Alvie Road, Mt. Waverley.

Film show—8 p.m.

3rd August: Laurie Jackson, 74 Cuthbert St., Broadmeadows.

7th September: Kevin Jordan, 16 Faulkner St., Clayton.

THE TICKET BARRIER

Watch this space for details of this all-Australian feature commencing next issue.

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QR 'WHO' 45' Steel wagon	★
WAR 60 Ton Bauxite Hopper	★
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TR 'W' class Diesel-Hydr. Loco	★
SAR 'On' Ore Wagon	★
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NSW C30 Class 4-6-4T Loco	□
NSW 'MRC' Refrigerator Car	□
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"TOKAIDO" Express (light train) 4 car, with track, 2 extra motors for use with train, new. $35—offers. Phone 93-1586, Sydney.

NEW and slightly used HO/OO locos and stock (Fleischmann, Lima, Hornby and Tri-ang)—also Peco points—at bargain prices. Write for list. Milroy Traders, Box 152, Wellington, N.S.W. 2820.

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DETAIL Blue Prints, Steam Locomotives, all gauges. Also castings. 7 m/m Outline Blue Prints. Marine Engines. Bolton, 70/72 King St., Sydney, 2001. Catalogue $1.00.

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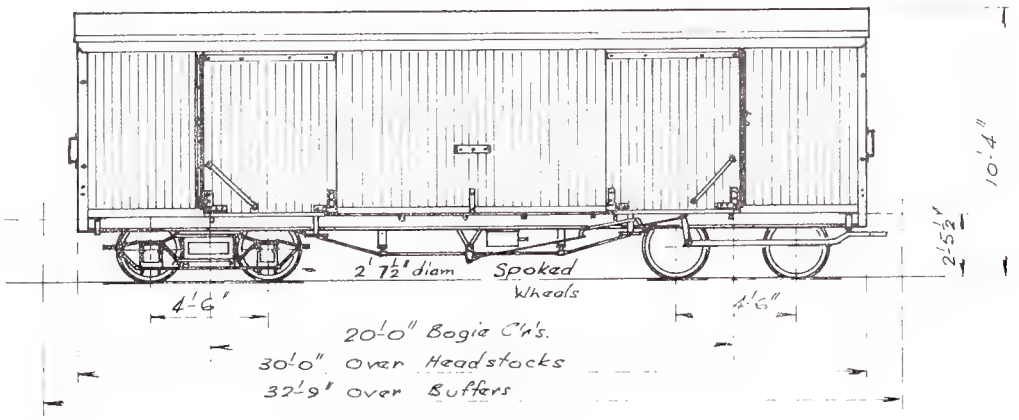
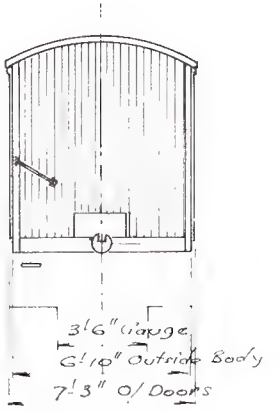
This Class "V" Covered Wagon of the W.A.G.R. should be an excellent prototype for the modeller to reproduce for his layout. The plan was drawn by Norm Coughlan and the photo is an official W.A.G.R. one.

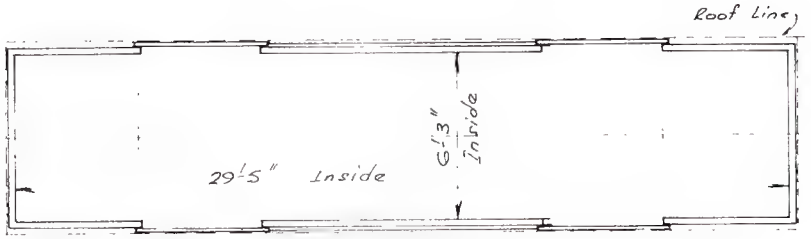
our plan



SIDE ELEVATION



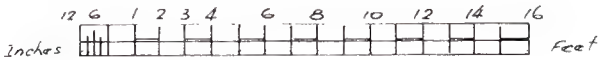
END ELEVATION



FLOOR PLAN.

NOTES
COLOUR - MID-GREY
LETTERING - WHITE
INTO SERVICE - 1896
NUMBER IN SERVICE 1967 - 70

REF. DRG W.A.G.R. 21/1541



SCALE

WEST. AUSTRALIAN GOVT. R'LYS. 3'-6" GAUGE		
COVERED WAGON CLASS 'V'		
DRAWN	N. Gough	S.C.R. PUBLICATIONS
DATE	April '68	PLAN & PRINT SERVICE

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THE MAGAZINE DESIGNED FOR ALL RAILWAY HOBBYISTS

THE AUSTRALASIAN MODEL RAILROAD MAGAZINE

Price: 30 cents
Single Copy
JULY/AUGUST, 1968
Vol. 3, No. 33

Registered at the G.P.O., Sydney, for transmission by post as a periodical

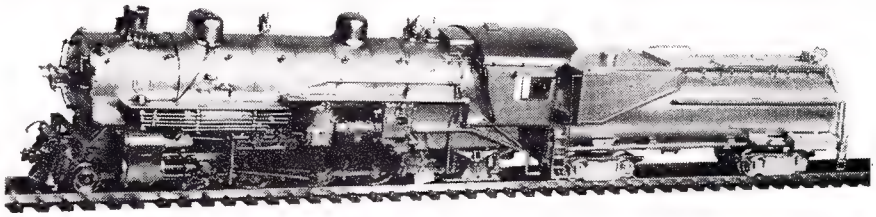
Features include:

- SIMPLE TURNOUT OPERATION
- BUILD A VR "T" CLASS DIESEL
- EXQUISITE VINTAGE MODELS

NEW!

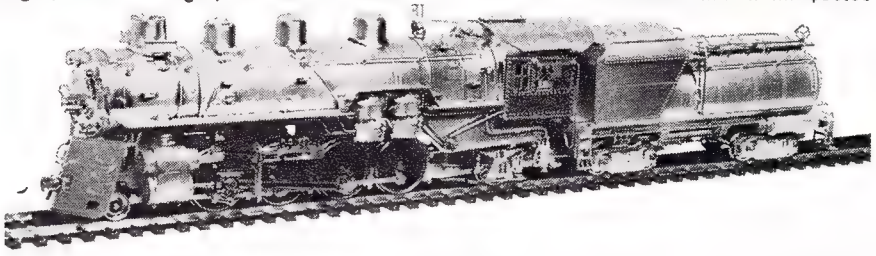
RECENT IMPORTANT DELIVERIES IN HO SCALE . . .

S.P. 'MK-5' 2-8-2:



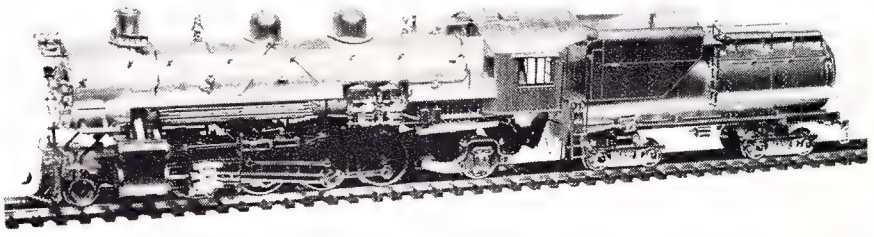
Built by Katsumi to the order of Balboa Scale Models, this model is a fine reproduction of a real work horse. Special pilot allows installation of any insulated auto. coupler. Adjustable spring motor mount. Sprung main frame and operating headlight. Brake system. Detailed backhead and cab interior. Unpainted, ready-to-run. Length, 11in. Weight, 16½oz. **PRICE** **$80.00**

U.P. 'MK-6' 2-8-2:



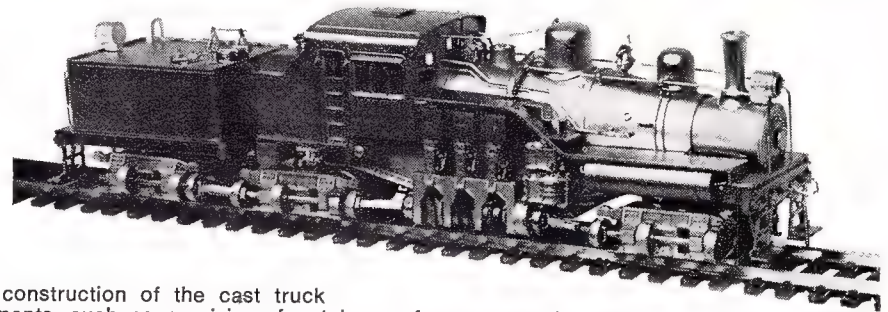
A further product by K.T.M., this Locomotive has been custom built for the 'MASTER SERIES' range of Balboa Scale Models. Fully detailed down to cab seats and built up backhead. Sprung frame equipped with brake shoes, hangers and rigging. Adjustable motor mount. Pilot deck and shield allows installation of any insulated auto. coupler. All external superstructure hardware included. Polished finish. Length, 11⅜in. Weight, 1lb. 5oz. **PRICE**..... **$97.30**

U.P. '2300' 2-8-2:



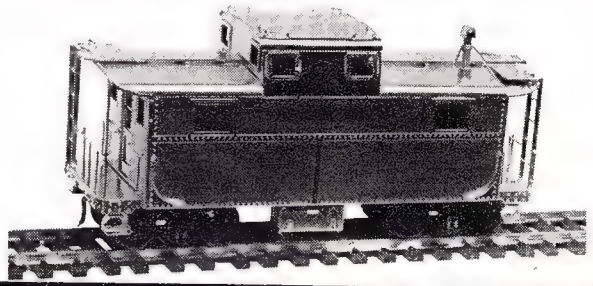
The '2300' series were a numerical extension of the '2200' series, varying in detail from previous Mikado type locomotives on the U.P. system. This fine model, outshopped by Kumata for L.M.B. Models, comes with pre-blackened, sprung frame. Drivers are equipped with brake hangers and shoes, and the model comes with polished finish. Length, 11½in. Weight, 23oz. **PRICE** **$73.25**

WILLAMETTE GEARED LOCO:



Following expiry of the basic patents covering the Lima Shay, the Willamette Geared Locomotive appeared in 1922. Among the Willamette improvements were the use of Walschaert's valve gear system which eliminated half the Shay's eccentrics and permitted a different arrangement of the cylinders with all valve chests pointing outward for ease of maintenance. The general construction of the cast truck frames accounted for many improvements, such as provision for take-up for wear and easy access for inspection. Standard equipment included an all-steel cab. The 70-ton, 3-truck, saturated steam Willamette Geared Loco. has been meticulously built to the order of Northwest Short Line. Unpainted, honed, lacquered finish. Length, 7¼in. Weight, 17oz. **PRICE** **$85.00**

P.R.R. 'N-5' STEEL CABOOSE:



Modellers of modern Pennsy. railroading will welcome this authentic, up-to-date Caboose from the 'shops of Kumata. Of sharply defined construction and accurate in every external detail. Standard draft mountings to accept any of the popular brands of couplings. Unpainted, less trucks. **PRICE** **$13.55**

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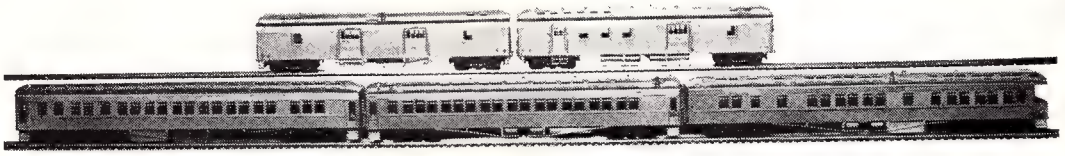
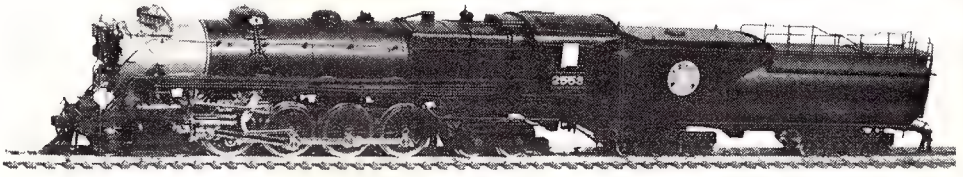
FUJIYAMA
SCALE MODELS



'FUJIYAMA' 5-CAR PASSENGER SET:

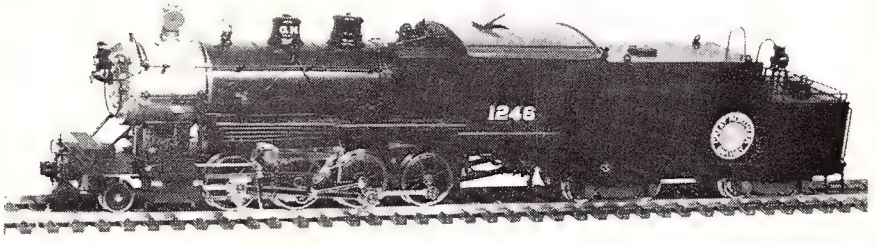
Model railroading has long needed some good wood-side, vestibuled passenger cars in keeping with the 'atmosphere' and character of the typical layout. 'Fujiyama's' Cars are the ideal passenger consist for the job. In solid brass, scale length, correctly detailed and finely made. Baggage-mail, Combination, Coach, Sleeper and Diner-observation. Set makes up an authentic 'local' train 50½in. long and weighing, with trucks, approx. 37ozs. Typical of early 20th Century cars, they belong on any layout. Honed, lacquered finish and supplied less trucks. **PRICE** **$89.70**

G.N. 'S-1' 4-8-4:



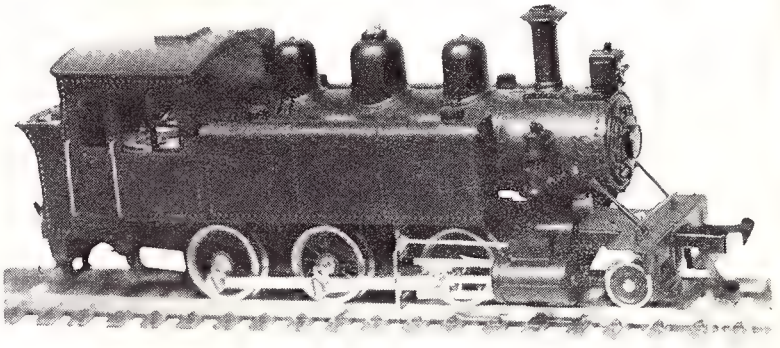
The last and, perhaps, the greatest refinement of steam power began with the delivery of the first 4-8-4 to the N P., by Alco, in 1926, from which the type became known as the "Northern". Modelled by Tenshodo with fidelity, skill and care their 'S-1' combines the distinctive appearance of Great Northern's steam power with precision operation, producing a scale locomotive of wide appeal. Equipped with MH-2 motor and sprung mainframe. Painted, ready-to-run. Length, 15½in. Weight, 38oz. **PRICE** **$123.50**

G.N. 'F-8' 2-8-0:



Built in 1907 by Baldwin, the 'F-8' typified the workhorse capabilities of G.N. loco's. as well as their fine lines and distinctive appearance. Now offered in 'Glacier Park' livery, Tenshodo's 2-8-0 lives up to its good looks in smooth, long-lasting performance. Equipped with MH-3 Motor and sprung mainframe. Dressed in Cal-Scale castings. Length, 9⅝in. Weight, 24oz. **PRICE $109.80**

BALDWIN 2-6-OT:



The familiar outlines of Baldwin side-tankers have graced most logging and branch lines during the past 75 years and here is the opportunity to include such a loco. on your pike. The short wheelbase, 6-coupled frame will negotiate the sharpest of curves, whilst the leading bogie will ensure stability in forward motion. Of heavy die-cast construction. Tenshodo's model is nicely finished in a pleasing black paint job. Length, 4¾in. Weight, 11oz. **PRICE** **$19.20**

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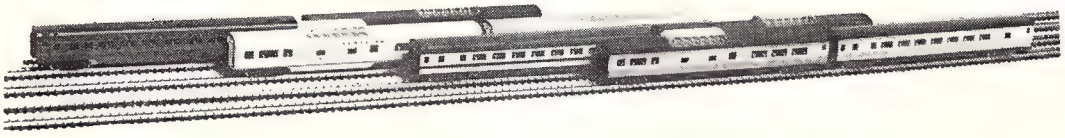
NEW IN N SCALE — FROM THE SHOPS OF SEKISUI.....



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OBSERVATION:	S.P. "DAYLIGHT", S.F., G.N. and P.R.R.	**$3.30** each

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other News from "THE DOCKYARD". . .

Replenishments just to hand from CCW include the following important new items: 9ft. L.M.S. Passenger bogies (less wheels) @ $4.60 per pair, 8ft. 6in. B R. Passenger Bogies (less wheels) @ $4.60 per pair and Spring Link Couplers @ 65c per pair . . . More O gauge 6 and 8-wheel Buckeye and Commonwealth Tender Truck Sets are just in from Katsumi, whilst their fine O gauge N.Y.C. 4-8-4 Niagaras have also been delivered, along with the N.K.P. 2-8-4 'S-2' Locomotives. Both are magnificent new developments in King Gauge. Prices being $286.00 and $275.60 each, respectively. The K.T.M. O gauge U.P. Steel Caboose (less trucks) is also to hand @ $29.25 . . . Whilst our Price List covering O Gauge Locos. and Rolling Stock is available for a large stamped S.A.E., those keen to have an illustrated catalogue of these brass products should obtain a copy of the new U.S. Hobbies Catalogue, stocks of which are now available @ $2.50, plus 17c postage . . . In HO and perfectly matching our new range of full length, Streamlined Passenger Cars, the first of the new Alco-G.E. PA Series 'A' & 'B' Diesel Units are now to hand. The Powered 'A' Units come in S.P. 'Daylight', S.P. Gray, S.F. and U.P. @ $62.20 ea. The Unpowered 'B' Units, in the same range of heralds, are available @ $27.00 ea. Coming later will be G.N. heralds, plus a Motorising Kit for the 'B' Unit @ $20.20. In addition to U.P., G.N., S.P. 'Daylight' and S.P. Aluminium heralds, the full range of Streamlined Passenger Cars are also now available in N.Y.C. herald. Southern Pacific Cab Ahead Locomotives have long fascinated those interested in articulated steam power. A few 4-8-8-2 'AC-4' remain in stock (some in O gauge, too), whilst Balboa's 'Master Series' 4-6-6-2 'AM-2' is also in stock. Now, just to hand from Katsumi, are a very few 4-8-8-2 'AC-12' @ $184.00, rounding out the fine series created for Balboa Scale Models . . . By the time these notes appear in print, Tenshodo will have delivered stocks of their new HO Santa Fe 4-6-4 'Blue Goose' Loco. & Tender. Painted and lettered, price $135.00. Fresh stocks from Tenshodo will also include more SD Power Truck Set, less motor @ $12.95 . . . HO Diesel fans will welcome the Alco 'S-2' Diesel Switcher @ $40.55 just in from Kumata. Following arrival of the Alco Models 'DL600B' Low Nose Diesels @ $51.00, a few High Nose version are also to hand at the same price. Other new HO models from Kumata include: C.N.J. 4-6-4T Loco. @ $57.85, S.N. "Old Maude" Motor Flat Car (with dual drive) @ $28.90, Hi-Cube Box Car Body @ $18.60 and P.R R. 4-Wheel Caboose @ $13.95 . . . Recent replenishments to hand from 'United' include our first stocks of their fine HO N. & W. Steel Caboose which comes with trucks @ $13.60 . . . As promised, Olympia's latest delivery includes the magnificent C. & O. 'J3a' Class 4-8-4 'Greenbriar' Loco. & Tender. This HO model, factory painted and lettered, is priced @ $129.50 . . . In N scale, Sekisui's 85ft. smooth sided Coach and Vista Dome Cars are now in stock. Detail even includes interior furnishings! Price: $3.30 each. Heralds: S.P. 'Daylight', S.F., G.N. and P.R.R. Those interested in N scale should send a large stamped S.A.E., requesting our Sekisui Atlas and Lima Price Lists . . . Our complete stocks of Wood Shapes is proving a boon to scratch builders. Now we are pleased to be able to announce that Milled Brass Sections are on the way. These, too, will be carried in regular stock. Further news on these new supplies later.

The MODEL DOCKYARD Pty. Ltd.

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216-218 SWANSTON STREET, MELBOURNE, C.1. —— 32 3505

The Australasian **MODEL RAILROAD** Magazine July/August, 1968 Volume 3 Number 33

The Official Journal of SCMRA in Australasia; incorporating the YARDMASTER, The Bulletin of the Sydney Model Railway Society

ARTICLES

9 **SIMPLE MANUAL OPERATION OF TURNOUTS, by Ralph Holden.**
Remote point control without costly motors.

10 **BUILD YOURSELF A MODEL "T", by Russ Siddall.**
Step by step construction of a commonly seen diesel.

12 **I.S.O. CONTAINERS GO BY RAIL.**
Shipping in containers is here to stay.

13 **PLANNING IN N SCALE, by Paul Van Leuven.**
Another layout plan in the wonder scale.

14 **VINTAGE 1880, by Bill Dive.**
The most exquisite models we've seen for years.

16 **BAJOOL TO PORT ALMA, by Kevin Ryan.**
A prototype line you will want to build.

19 **GOLDBORNE JUNCTION, by Jack McLean.**
Something more is happening at Wingrove.

21 **THE RAILWAY HOBBY IN JAPAN, by Peter Duckett.**
An interesting report on "brass loco land".

REGULAR FEATURES

6 Editorial.

6 On the Cover.

6 Mixed Gauge.

7 Armchair Review.

8 Shop Detective.

23 Mail Bag.

24 Club Car.

25 Yardmaster.

26 Market Place.

27 Our Plan.

EDITOR J. T. St. Leger Moss
ART DEPARTMENT Howard G. Armstrong, Norman Coughlan, Ivan W. Ive
PRODUCTION DEPARTMENT Peter R. Woolley
COPY DEPARTMENT Fay M. Brown
CIRCULATION & SUBSCRIPTION Terence N. Carpenter

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Editorial

In the past conventions of railway modellers and enthusiasts have not been attended by large numbers of people. As individuals modellers will come together to exchange ideas and will develop friendships. Yet often the organisations to which many of these modellers belong appear to be unwilling to cooperate among themselves It is natural that societies and clubs wish to retain their individualities but it appears to be forgotten that each was originally formed because of the common bond that exists among railway modellers.

With this in mind this publication has taken the step to organise a convention in Sydney at Easter, 1969. Whereas the United States and New Zealand have groups which can coordinate the successful organisation of conventions it appears that this publication is the only common contact between railway enthusiasts in this country.

Accordingly we have contacted all the clubs, societies and associations of whom we are aware to assist us in the successful planning and operation of this proposed convention. There may be other clubs which we have not reached and whose assistance we would greatly appreciate. It has taken the railways of Australia 114 years to achieve a measure of cooperation through standardisation. Must modellers and other railway enthusiasts wait so long to cooperate, to come together, to convene?

It is you the reader who will determine the success of our proposed convention. If you belong to a club you can urge your fellow members to participate. If you are a "lone Wolf" you can plan your Easter around the occasion.

Should the clubs we have contacted agree to hold th convention then an application form will be found in our next issue.

And should your appetite need whetting then may we inform you that amongst the features planned for the weekend are model competitions and exhibitions, railway films, lectures and clinics, train trip, special outings for the ladies and children and a very, very sumptuous banquet with entertainment and a famous guest speaker.

ON THE COVER:

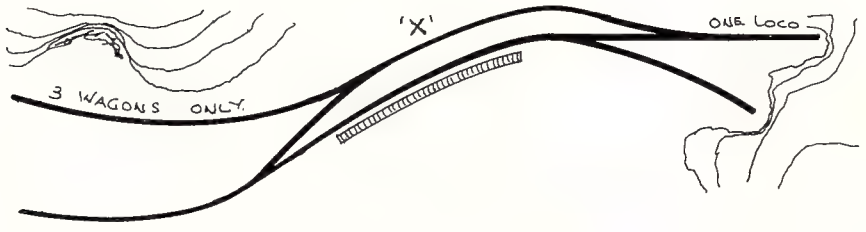
No matter which scale they run all modellers will admit to a secret envy of the man who is able to have a passenger carrying steam line in his garden. Our photo is of Ted McIntosh, of Homebush, N.S.W., whose railway is regularly open on Sundays to enthusiasts and charities. It is hoped that this layout will be one of those open for inspection during the proposed AMRM sponsored convention at Easter, 1969.

A PROBLEM
By Stephen Mansell

A goods train of three empty ore wagons is hauled up Rocky Incline into the loop beside three branch line coaches waiting at the platform at Rockstop station.

How does the locomotive most effectively spot the empty ore wagons without their caboose into the goods siding and then take the coaches into the city? Use the uncoupler at X. The locomotive is fitted with automatic couplers at both ends.

When the passenger train returns it must be able to readily haul the loaded ore wagons into the city.



MIXED GAUGE

By Spencer Street

Readers can be assured that, contrary to our article on Victor Harbour in the last edition, we do not believe the S.A.R. operates 17,000 h.p. locomotives. It was, of course, a mis-print. Most people know the 930 class to be a 1,600 h.p. version of the Goodwin-Alco mainliner, and similar to the 44 class of the N.S.W.R.

The 900 class is a locomotive which is not given the attention it deserves. These 1,588 h.p. diesel-electric locomotives were built by the S.A.R.'s Islington shops in 1951-1952, and they are a truly fine example of "cross-kiting" by a builder. The engine and traction motors were supplied by English Electric, the body is almost identical to the ALCO PA-3, which did not appear in the U.S.A. until 1953, whilst the bogies look very similar to those used by E.M.D. under their "E" series passenger locos.

For all that, these units have one claim to fame which is all theirs—they were the first heavy mainline diesel-electric locomotive to enter service in Australia. Weighing 126 tons and measuring 63 ft. 4 in. over head stocks the 900's were also the longest and heaviest locomotives on the Australian Government Railways until the introduction of the 135 ton, 63 ft. 6 in. "L" class of W.A.G.R. in October, 1967.

★ ★ ★

Many comments have been heard about the high cost of the Balboa smooth-sided streamlined cars, now available from the Model Dockyard. Now I don't intend to discuss the price of these cars; if they don't sell in Australia, I am sure that the Dockyard would not stock them. But this does give food for thought.

Let us assume a follower of U.S. prototype wishes to model a steam hauled streamliner using these cars. He would need seven cars to produce a reasonable train behind say a 4-8-4, so his total cost including engine would be about $240.

Would the people who call for good quality models of Australian prototype pay that sort of money for a model of the Spirit of Progress?

★ ★ ★

At last we are getting model kits of Australian equipment. I know of two producers in Sydney, there may be others, elsewhere, but in Sydney we have quite a range available. One producer is concentrating on N.S.W.R. The other, while biased to N.S.W.R., looks for equipment which is common to two or three systems, which should widen his market, and enable quantity production to be attractive. It is to be hoped that these people will continue to produce a diverse range of equipment.

This way they will grow. It would be disastrous for this important development in Australian modelling to create a situation similar to that in the U.S.A. a few years ago, when several manufacturers were all producing models of E.M.D. F units as their only locomotive type.

★ ★ ★

Seeing the book "700" made me think of many years ago when I received a book on railways. In it was a picture of a 720. The caption said simply "a locomotive of the South Australian Railways". I was firmly convinced that a caption had been transposed. Then later I discovered the 520 class. It was then I realised that there were locomotives bigger than a PB15 of Queensland Railways.

I often wonder why more people who follow North American prototype don't have another look at the S.A.R. as an Australian system to model. It is the most amazing combination of North American and British Practice in the country. Who else used a 4-8-4 to haul four 'dog-box" cars on a twenty mile run?

ARMCHAIR REVIEW

Contributions to this column are welcomed

BOOKS

GREAT RAILWAY JOURNEYS OF THE WORLD. K. Wescott Jones. 5¾ in. x 8¾ in. 192 pages, 43 black-and-white photographs.

This book could be read with interest by historians, those who like travelogues as well as those who just love railway stories. Modellers looking for an inspiration to complete the scenery on their layout will find that inspiration here. Supplemented by a variety of photographs relating directly to the text, and introduced by a brief but nonetheless helpful historical background, the reader is taken on a number of train journeys through 18 different railway environments, many of them covering a number of different railway systems. Amongst those mentioned are the Canadian Pacific, Southern Pacific, name trains of Europe including the Trans-Europe Express. Through Australia on some of the State systems and the Trans-Continental, New Zealand's Main Trunk line, a number of African systems, and then on up to the Arctic Circle, back to the Orient Express (the inspiration of recent James Bond movies), Trans Siberian Railway, and other lesser known trains of Europe, the Middle East and Asia, South America.

No comprehensive railway publication would be complete without some reference to the British Railways, which is included in this book. In all, some 20 countries are visited, and to make this book really worthwhile as a reference book, an Index of Proper Names mentioned has been included.

RAILWAY NEWS, produced by the N.S.W. School Railway Clubs Association, P.O. Box E24, St. James Post Office, Sydney, N.S.W. 2000. 15c per copy or $1.50 per year, commencing each November. Published monthly February to November.

It is pleasing to find an education system encouraging the hobby activities of its pupils, and in N.S.W. even the railfan has not been neglected. For many years now the School Railway Clubs Association has helped various individual schools form clubs, and enabled them to organise fan trips and model railway layouts. This means that clubs which cater for older members receive into their ranks new members who already are experienced in the modelling field.

Their magazine, the Railway News, shows the high standard which can be achieved by young enthusiasts when properly guided.

It has been recently restyled, and contains a wealth of good information on the N.S.W.R., with occasional articles about other systems. The articles are simply written and while many readers may not feel they would be interested in this little book, I am sure that the railfan in his early teens and even a bit younger would find this book a most worthwhile gift.

"700" by Douglas Colquohoun, Ronald Stewien, Adrian Thomas, produced by the South Australian Division of the ARHS. Price $2.

This book is about the 700 series steam locomotives of the South Australian Railways. Like the designers of the locomotives, the authors have leaned heavily on American practice in the production of this book, and the result is well balanced and of interest to both modellers and rail enthusiasts.

The book is well illustrated with photographs of generally high quality, although some, which have been included because of their historical interest, are poor and probably could have been omitted without detriment to the book as a whole. The illustrations are well captioned and even without the text would make an average quality book.

More importantly, however, the illustrations have been chosen for their relevance to the text, in fact, they are complementary, and this is one of the things which makes this book such an outstanding contribution to its field. The text is well written, informative, and as far as can be ascertained, accurate.

The book is divided into sections which deal with each of the progressive variations of the class. Each section is headed by a small outline diagram. As a modeller, I would have preferred these drawing to have been larger. As the back of the book there is a large fold out diagram of a "700" which loses for the opposite reason—it is too complex to be of more than academic interest. Also at the back of the book are load tables and a useful table of coal to oil, or coal and oil conversions by dates and road numbers—a table most useful for the accurate modelling of this class of engine.

As I said at first, this book is very much like the locomotives it is about. It has faults, but they do not detract from its quality. The book is the best $2.00 worth I have seen in this field, and I look forward to the books on the 500 and 600 class promised by the authors.

OILS TO ORDER

The advent of colour photography has changed the world of the painter. Formerly, the artist had to cope with the changing light throughout the day as he tried to capture a landscape. Now he can capture his scene with his colour camera, take it to his studio, project it on the wall and depict it in natural colour at his leisure. However, all modellers are not also painters in oil.

We have received two examples of this technique from one of our advertisers. These were paintings measuring 18 in. x 12 in. and have been produced on masonite. Although we did not receive the original colour slides for comparison the scenes appeared to be well and faithfully executed and we feel that any modeller would be only too happy to have an oil painting of his favourite railway scene hanging on his wall. The size we received cost $14.00. The prices may vary according to the amount of detail and the size required by the purchaser. Why not enquire about one of your own slides? It will only cost a 5-cent stamp.

MODELS

KIBRI KIT No. 8324. Semi-detached house. $2.75.

Our sample from the distributors: Wilkinson, Beale & Tindley, 204 Clarence St., Sydney, N.S.W. 2000.

It is a pleasure to see a continental kit which can merge into the Australian scene. Most capital cities in Australia have houses resembling the one which can be built from this kit.

We had partly completed the construction when we realised this was really a semi-detached building and represented one of those which to outward appearances looked like a fairly large mansion. The only outward sign that it contained two residences is the fact that it has two front doors. Careful application of a good styrene cement, avoiding damage to the outside surfaces, will produce a fine model. The kit contains curtains and blinds for windows and excellent glazing material.

The fine finish which results is in part due to the small pieces of plastic which are supplied for eaves, chimney pots, window frames, television aerial and hedges. The only parts not supplied are Alf Garnett on the left and Mrs. Everage on the right.

STREET, STATION AND YARD LAMPS

Supplied by The Model Dockyard, 216-218 Swanston St., Melbourne. 3000. Prices below.

These lamps are in HO scale and come in five types. Modellers are certain to find many uses for these fine accessories. They are constructed in good plastic which does not appear to warp with heat. All lamps are replaceable. We found that when operated on 12 volts they were much too bright for the average layout. Accordingly, we wired them in series of two and a more natural glow resulted.

The globes with the attached wires may be pulled through the hollow standards for replacement, should they be burnt out, in the four lamps depicted on the left of the picture. The wires to the other yard lamp shown on the right may also be removed, though replacement may be a little more difficult. Reference numbers and prices from left to right are as follows: No. 1C, $1.40 per set of 3; No. 2C, $1.40 per set of 3; No. 3C, $1.30 per set of 3; No. F7, 95c each; No. F8, 95c each. We feel these prices are reasonable for such good quality. We were particularly taken by item 2C, a type of street lamp which is being seen more frequently in our cities. Number F7 would be very suitable as a gas lamp in layouts where such lamps might be seen.

TRANSFORMER

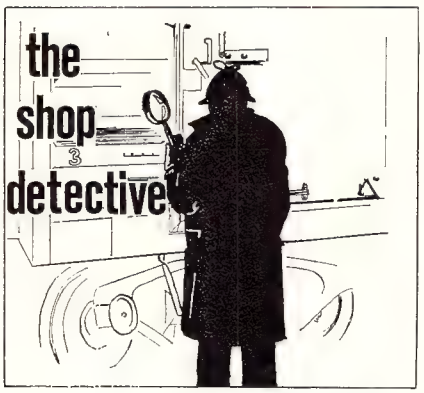
FERGUSON TRANSFORMER, Reference Number P.F. 2813.
Supplied by Radio Despatch Service, 869 George Street, Sydney. 2000.

Modellers who have been using transistorised controllers, especially those which can be varied to suit the resistance of the locomotive motors, have in the past needed to have a special transformer built for them.

In response to this need the transformer under review has been designed and a very small batch has been made. Should they become popular, and we have no doubt that this will happen, further production will probably result.

The primary winding is for 240V, 50 cycle. On the secondary side tappings have been made for the following voltages: 11V, 13V, 15.5V, 18V, 21.5V and 25V. The device is rated at three amperes continuous and five amps intermittent. The wires for the secondary tappings are colour coated. The windings are protected by a baked varnish impregnation.

The transformer is of vertical open construction with mounting feet. Dimensions are: height 3-3/16 in., width 3-1/8 in. and length 3-1/4 in. Mounting brackets are 2-5/16 in. (L) by 2-1/2 in. (W). The mounting slots are 3/16 in. The weight is 5-1/4 lbs. Should you wish to order one by mail, including sales tax the price is $8.15.



At the time of writing it's pretty cold in Melbourne, and unless you had the foresight to install central heating in your garage cum train room, as did one of our canny contributors, you will be looking for some inside operations provided there are no objections from the catering staff.

Scratchbuilding of cars, real estate and lineside structures immediately comes to mind. The more venturesome could try a loco. You can obtain your supplies of N E scribed siding and shapes from Dockyard or Titchers. Dockyard also has Austral Modelcraft scribed siding and various grades of Styrene and its bonding agent, MEK.

Detailing parts in all scales are obtainable from Dockyard, and to a lesser extent, from Titchers and M S D. Melbourne Sports Depot is showing a range of Xacto tools, including several knife shapes, carving heads, and razor saw There's also a rack containing most all the adhesives you'll need.

Perhaps kit building is more in your line. Then you'll find that Dockyard caters for all grades of ability, from the simple snap together plastics, to the craftsman type kits such as those by Silver Streak and Walthers.

Then there are the Bilteezi, Faller, and Airfix kits, obtainable most any place, but your correspondent urges that you watch your local model railroad shop and advertisers in this magazine.

As a first try at loco building why not motorise an Airfix Prairie tank, as set out in Vol. 2, No. 12, of this magazine. (If you haven't got it, the Editor can supply. See elsewhere this issue.) All the bits and pieces are available at the Dockyard. I notice, too, that Hambling wheel press is again available. There's quite a large basket of OO scale passenger and freight cars at M S D, marked prices. Perhaps some could be rebuilt to more closely resemble V R prototype.

I have been taken to task over a recent statement that 'O' scale had expanded to two cases at Dockyard. Actually there has been an explosion there, with O scale stuff taking up some areas previously occupied by smaller scales. Super quality, too.

Scratch builders in brass will be happy to know that at about the time you receive this magazine milled brass shapes, product of 'Milled Shapes' of U.S.A , will be available at Dockyard. I have seen the forward samples, and know that they will fill a long-felt need. Angles, channels, 'H's, 'T's, 'Z's, from about 1/32in. upwards, but no prices as yet.

I recently received some 'Sentinel' parts for the M H G, namely the ends and the ventilator set. Could be that the other pieces will shortly be available once more.

A Simple Method For The Manual Operation Of Turnouts

By Ralph Holden

There is obviously nothing quite so nice as being able to control every aspect of our layout without having to move away from the master panel and if this is our goal, then we must just grin and bear the cost of electrically operated turnouts. But there may in fact be a number of situations in which a manually operated control is almost as suitable. A little-used siding could easily have a hand-operated turnout; a group of switches in a yard close to the control panel may be within easy reach for manual operation; or perhaps if we've done all our dough on that expensive Japanese import, a substitute for a lot of switch-motors is going to be a must for a while.

All the yard switches on my own layout are manually operated, and the control knobs stretch along the length of the yard on the trestle front, with the control panel roughly central. The furthest turnout control is about 8 ft. from the panel.

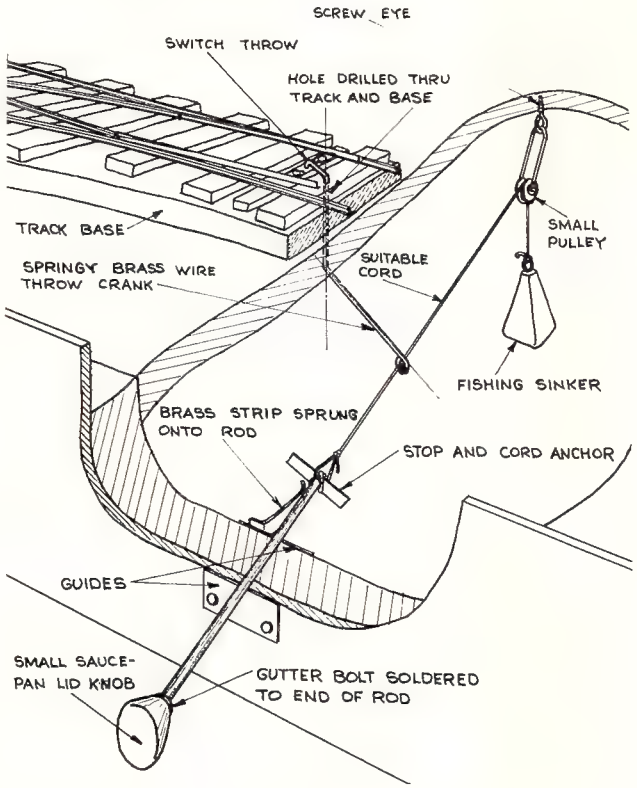
The method I have used is extremely simple, and in fact so much more so than other methods I have seen published, that I felt it might be worth passing on. The diagram is almost self-explanatory. In the original it has been used with 'O' gauge track, but obviously is just as suitable for other gauges.

The switch throw consists of a length of hard brass wire, which passes through a hole drilled through the track base, with the top bent to operate in a manner similar to a number of commercial turnouts (e.g., 'Atlas', and 'TruScale'). When this wire is in position, it is then bent at right-angles below the track base, and a small loop formed 2 in. or so along its length (there are no critical dimensions). I use 22g brass wire, but HOers will doubtless require something smaller.

The operating pull consists of a length of $\frac{1}{8}$ in. steel rod, about 6 in. long, to one end of which a steel gutter-bolt is soldered so that a small saucepan-lid knob may be screwed onto it. Two 1 in. square brass plates are cut, each with a central hole for the shaft, and with four small holes (one in each corner) to enable them to be tacked to the layout framework. One of these plates also has a strip of brass—approximately $\frac{1}{4}$ in. wide by 1 in. long, soldered to it such that if the shaft is passed through the hole, the strip bears upon it as a friction device. A $\frac{3}{8}$ in. hole is drilled through the trestle frame at the appropriate position, and this second plate tacked behind it. The other plate is slipped onto the rod, which is then passed through the hole in the trestle and the rear plate. The front plate is positioned so that the rod is horizontal, and tacked into place. The friction strip may now need to be bent so that the rod is suitably stiff to pull. A small brass strip is then soldered to its end, to act as an anchor for the operating cord, and a stop when the knob is pulled.

Finally a piece of fine white twine is tied to the end of the shaft, then to the loop on the arm of the switch throw wire, passed over a small pulley suspended from a screw-eye as shown in the diagram, and a fishing sinker hung from it. I use those of 4 oz. weight.

When the knob is pulled the weight is raised and the turnout thrown. The springiness of the throw-arm ensures a closure pressure on the blades, and is held firm by the friction strip on the shaft. When the knob is pushed the sinker pulls the blades in the opposite direction, and provides positive closure pressure. There is no real limit to the distance between the knob and the switch throw, nor need the knob lie directly opposite the turnout being operated, if this is not convenient for any reason.



A GUIDE for the PERPLEXED... MODEL RAILROADER

THE EVER-GROWING NUMBER OF SCMRA DATA SHEETS JUST ANOTHER REASON FOR MEMBERSHIP IN SCMRA

BUILD YOURSELF A MODEL 'T'

By Russ Siddall

The Victorian Railway "T" class is an interesting group of locomotives. Although considered identical for traffic purposes the locomotives vary greatly in external appearances.

Engines numbered 320 to 346 are conventionel hood units 44ft. 6in. long, many similar Clyde GM locos may be seen in operation on railways throughout Australia and New Zealand. Numbers 347 through 366 have raised cabs, and are similar to the NSWR 49 class. This group and the subsequent types are all shorter measuring 40ft. 8in. over headstocks. The introduction of the third group numbered 367 to 398 also introduced the low profile short hood to Australia. A fourth group with engines rated at 1000 hp instead of the earlier models rating of 875 hp are numbered 399 to 406. These units can be identified by their twin exhaust stacks. Some of this last group of locos have been fitted with special low speed controls for hump shunting in Melbourne's new hump yard.

It is usual for the Clyde Model G8 to be fitted with 6 wheel bogies, but the "T" class locomotives are all Bo-Bo. With 87 units in the class they can be seen on both the 5ft. 3in. and 4ft. 8½in. gauges of Victorian Railways, hauling name trains, shunting and assisting their bigger stablemates—the "S" and "B" class on fast interstate freights. Nearly identical locomotives are also used on Victoria's only 3ft. 6in. gauge line, at the Fyansford quarry of Australian Cement.

I have chosen to build a model of T363 but this is only my choice. The techniques used in building this engine, can easily be adapted to produce anyone of the variations discussed or any other hood unit

We will start by building the underframe:—

This stage is the simplest and most satisfying as there is relatively only a small amount of work required to get it to the point where it will run.

Bill of materials:

- Tenshodo power truck for GP-20 without motor—Cost $10.50.
- Pittman DC60 motor—Cost $5.18.
- Hard Brass 1/16in. thickness.
- Brass bar 5/32 x ¼in.

Tools required:

- 8 B.A. tap.
- 8 B.A. tapping (No. 50) and clearance No. 44) drills.
- Nos. 38, 5/32in., 7/32in. and ¼in. twist drills.
- Portable electric drill or hand-drill.
- Hacksaw.
- Steel rule, square, scriber, centre-punch.
- 8in. smooth file.
- Zona saw, jewellers saw or similar fine metal-cutting saw.
- Modelling knife. Soldering iron.

Construction:

Mark out the base plate on the 1/16in. hard brass. This is 108mm (4¼in.) by 28mm (1⅛in). The length must be exact but the width is not really critical so long as it is not too wide to fit between the sides of the superstructure, which are 32mm apart, or too narrow for the top to sit on it after the slot for the motor has been cut out. One inch wide would be quite OK.

Whatever the width of this piece, the holes shown must be marked out, centre-punched and drilled accurately to the sizes shown.

Make the spacer piece to carry the motor next. Mark out, centre-punch and drill the holes. Then use your ¼in. drill to countersink the No. 38 holes far enough to get the head of the screw supplied with the motor below the surface.

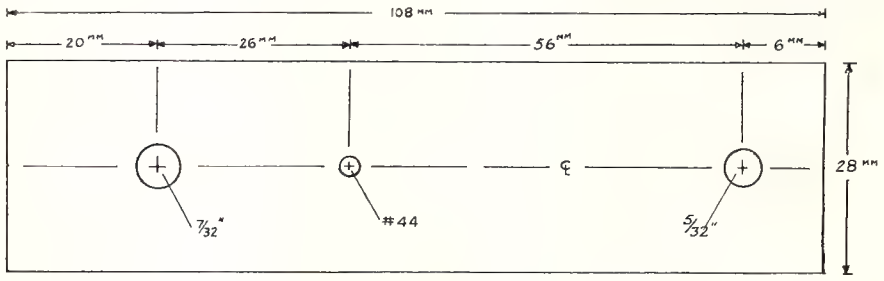
Then cut off the spacer piece to 1in. length, 4mm past each of the end holes. These cuts will probably break into the countersunk holes, which is the reason for not cutting the piece to length before doing the countersinking. Tap the No. 50 hole 8 B.A.

The GP-20 power truck wheelbase is too long for the "T" class, so the next job is to modify the connection between the trucks. Each truck has a shaft with a brass universal connection. Measure the length of shaft visible between the brass connection and the truck frame, sweat off the connection, then cut the length you measured off the shaft.

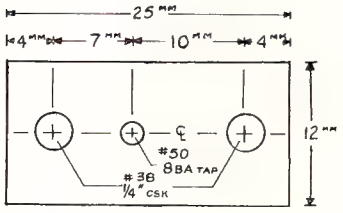
Smooth the end of the shaft with the file, then solder the brass connection back in place. I did this without taking the truck to pieces.

Do the same with the other truck.

Now mount the trucks on the brass baseplate you made, screw the spacer piece for the motor onto the motor using the screw supplied and the nut on the long fixing screw at the magnet end. You may have to file this piece at the end nearest the armature to make it sit flat on the base of the motor. Put the rubber connector supplied on to the motor shaft,



BASE PLATE



MOTOR SPACER

Drawings not to scale

Australasian Model Railroad Magazine

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and then fix the motor in place with an 8 B.A. screw up through the bottom of the base plate into the tapped hole in the spacer.

Line the motor up and then push the drive shaft of the power truck into the end of the rubber connector. Adjust this until the top gear is just not quite touching the front of the truck bearing.

If you have used the measurements given everything should fit nicely. Solder the flexible lead supplied onto the insulated brush, take the other end of the rear truck mounting screw, and you should be able to set the mech on the track and see if it works.

However, you won't get far with the wheels locked on the second truck, so let's get on with the connector between the trucks. This is a hollow nylon tube with an elongated hole one end and slots the other.

Set the mech. on the track and measure the distance between the pin on the rear truck shaft, and the hole on the front truck shaft. Mark this distance on the nylon connector, measuring from the elongated hole. Add 10mm for luck, and then cut off the excess with your Zona saw. **Do not** cut off the end with the hole—cut off the end with the slots—or you WILL be in trouble!

Now use the Zona saw plus your modelling knife to cut new slots in the end of the nylon tube to reproduce the ones you've just cut off.

The key here is to TAKE IT EASY. The material is fairly easy to cut, so cut small pieces off until you can gradually get it down to the right length and the slots the right size.

Try for fit after each cut and you can't go far wrong. There is a little brass pin supplied which is forced through the hole in the brass connection, so that the nylon connector is permanently fixed to one truck. You will need to do this some time about now.

When you think the connector piece is fitted properly, try her out on the track. If she runs smoothly in both directions and round your sharpest curves, then you're got it made!

If you get vibration and binding, check that the slots in the nylon connector are deep enough—it's suprising how much difference an extra half a millimetre here makes.

Well, I think that's it—next edition we will start to build the superstructure.

NEXT MEETING ?

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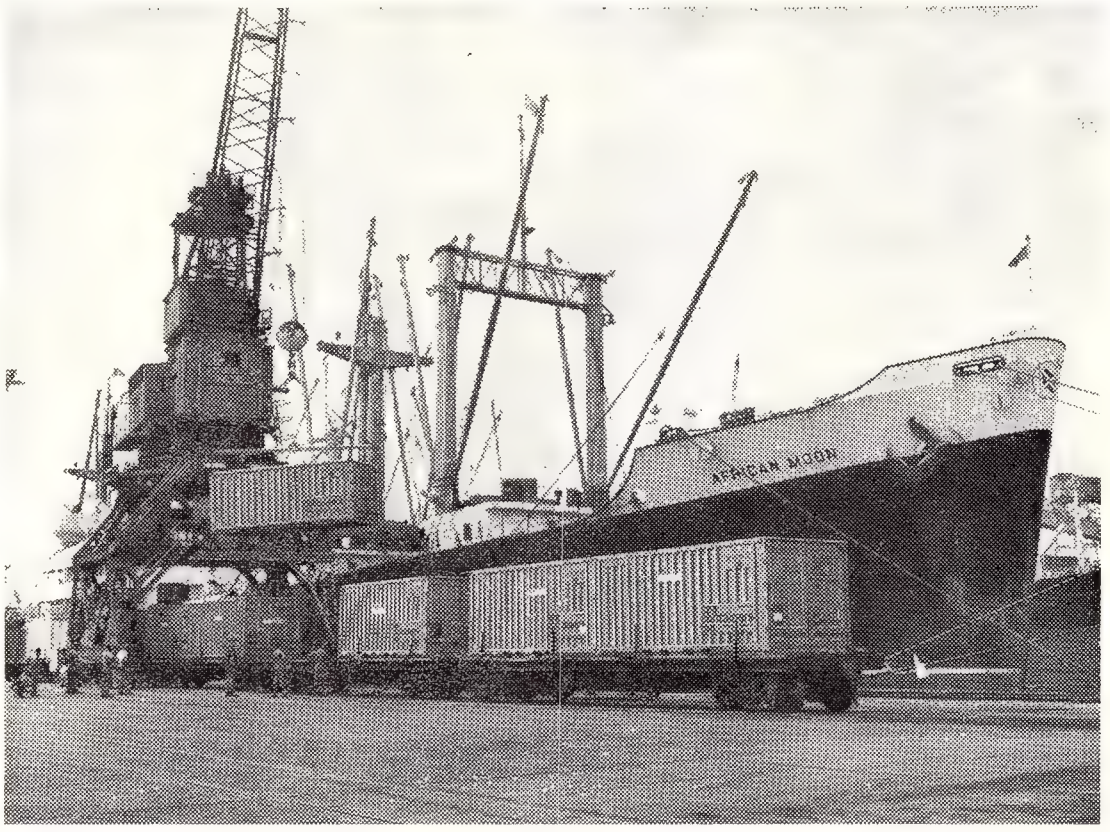
'CPH' Railmotor □
30 Class 4-6-4 Tank Loco ◈
36 Class 4-6-0 Loco □
38 Class 4-6-2 Loco ◆
57 Class 4-8-2 Loco □
45 Class 1800 hp Diesel Alco ●
NZR
'Vs' Insulated Meat Wagon ★
'Kp' Covered Goods Wagon ★
'Ab' 4-6-2 Loco ★
QR
'CMIS' Refrigerator Car ★
'H' Open Wagon ★
'PJM' Drop Centre Wagon ★
'WHO' 45in. Gondola ★
A.E.C. Railmotor □
SAR
'FB' Flat Car □
'On' Ore Wagon ★
Goods Brake Van (Composite) ★
TGR
4-wheeled Van and Truck ★
'W' Class Diesel Hydraulic Loco ★
VR
'Z' Brake Van ★
'QR' Gondola ★
'Av' & 'Bv' Passenger Car ★
'NA' Class 2-6-2 Tank Loco 2ft. 6in. Gauge □
WAGR
60-ton Bauxite Ore Hopper 3ft. 6in. Gauge ★
'RCB' Gondola Ore Hopper 3ft. 6in. Gauge ★
EMU BAY (Tasmania)
4-8-0 Loco ★
Canadian National
Express Reefer □



African Moon being unloaded at Balmain. Containers from this vessel were unloaded direct on to five waiting railway flat top wagons.

I.S.O. CONTAINERS GO BY RAIL

The article below is a record of the first rail movement on N.S.W.R. of International Standards Organisation containers. For modellers in Australia, containers will give model railways extra colour. The containers mentioned were painted bright orange, but we have seen them in many other colours; blue, green, silver and red. The containers themselves are all lettered to an international standard pattern. The SCMRA is soon to make the lettering of international containers the subject of a data sheet.

A container facility would be a most interesting feature of a layout. The space taken need not be great. A siding and an area for a fork lift truck to manoeuvre is all that is necessary. This track could also serve as the terminal for flexivan services.

A small area for storing containers could also be made available, but remember, the economic advantages of this method of shipping is brought about by keeping the containers moving.

The first overseas containers consigned direct from an American factory for despatch by rail to a country destination in New South Wales, were unloaded from **African Moon** onto rail wagons in February.

The 10 20ft. x 8ft. x 8ft. containers were packed with over 34 tons of essential components for Westinghouse major appliances.

The appliances will be manufactured at the Email factory at Orange, one of the biggest and most successful decentralised industries in New South Wales.

Five railway flat top wagons, of the U.M.E. type of N.S.W.R., were waiting at No. 2, Balmain berth to receive the containers.

A 20-ton wharf crane was used to unload the containers from **African Moon** direct onto the rail wagons.

The consignment was the first example of the new trend rapidly taking shape overseas—to pack each container at the true point of origin, and to move it directly through to its final destination without unpacking.

Any shipper has access to the Australia-wide railway system on which containerised import or export consignments can be carried almost as easily as they are now moved interstate.

TRANS-AUSTRALIAN RAILWAY MEDALS 50th ANNIVERSARY 1917-1967

These beautiful medals are now available in bronze, silver and gold. A limited issue only is being made and the silver medals will be serially numbered. Each medal is supplied in a deluxe plush case with suitable inscription in the lid. The medals are 1½in. in diameter.

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As production is limited early application is advisable.

RAILROAD BOOK COMPANY OF AUSTRALIA

189 Homer St., Earlwood, N.S.W. 2206

PLANNING IN N SCALE

By PAUL VAN LEUVEN

In last issue we have seen that layouts could turn out quite large in size, where the viewer or operator stand on the outside of the track plan. But if we happen to be inside a layout with track all around us then we can see only a portion of the layout at a glance and this would be the ideal set up to give real prototype impression.

Usually we design a track plan that fits the space we have and then put in some sort of scenery to disguise the nature of the plan and find somewhere a place to insert a mine or industry. We seem to have the wrong philosophy on modelling. A real railroad comes into being because there is a need to connect two places by rails to more people and goods and the only purpose of the main line is to connect the two places. Instead of building a railroad to connect our terminals and industries we insist on building our track plan first; then try to dress it up like decorations on a Christmas tree.

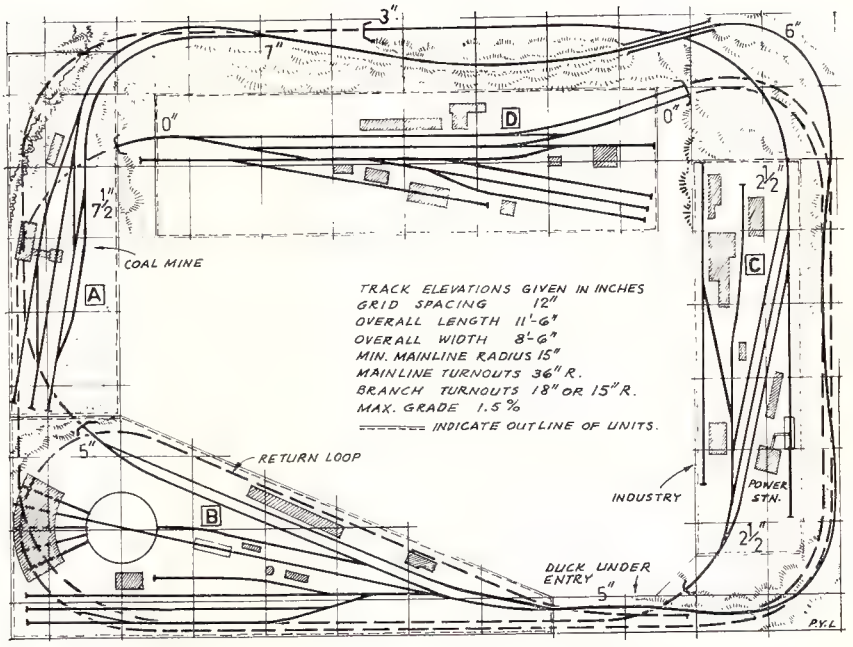
Let us develop the places first, then design the main lines that connect them. This gives us the opportunity to get away from toy train running and really do small scale railway modelling.

The main lines do not need to follow a special pattern. Start to design and develop these terminals first as individual "units". This would suit most of us as we can put more work on our terminals rather than on the scenery of our main lines. Building these units first will also be easier on the pocket as the whole layout will come into being like an instalment plan. It will permit us more realistic design, because we are not forced to make it fit into a specific track plan. Each unit can be used on its own, even as a shelf layout which specially would suit flat dwellers. It gives us also the opportunity for any major changes to the whole plan if we later want to do so, as the units are semi-portable.

A unit can consist of as little as a couple of feet of branch line with a shed, to as much as a whole station yard complex. They can pe constructed on a flat surface as small as 4ft. x 1ft. or as large as you like. Once designed the main lines do nothing else put connect them.

A sample plan shown here is of the four unit type where the main line spirals around the room on a descending grade from A to D. Each unit is on a different level to create the illusion of real towns or terminals at distant locations, thus a train with a load of coal can run from A through B to the power station at C.

Most of the main line can be hidden behind back drops or hard shell scenery. Trees and shrubs could be used where more than one level is visible. With this type of track plan the main line, which is on a board 2in. to 4in. wide, needs very little detail. The units are best kept away from the corners where main line curves are located. This avoids the difficult fitting in of yards and other tracking in and around curves.



By increasing the distance between units with another lap around the room we are creating real distance suitable for prototype timetable train operations.

Wiring can be simplified by using one fixed main controller for all units and one portable hand held controller then can be plugged in at any one unit to control the train at that terminal, which unit will then be automatically disconnected from the main controller and operate via the portable controller.

DON'T FORGET THE SYDNEY MODEL RAILWAY EXHIBITION

SYDNEY LOWER TOWN HALL

OCTOBER, 1968

Sat., 5th	Sun., 6th	Mon., 7th
9 a.m.-10 p.m.	12.30-7 p.m.	9 a.m.-8.30 p.m.

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VINTAGE 1880

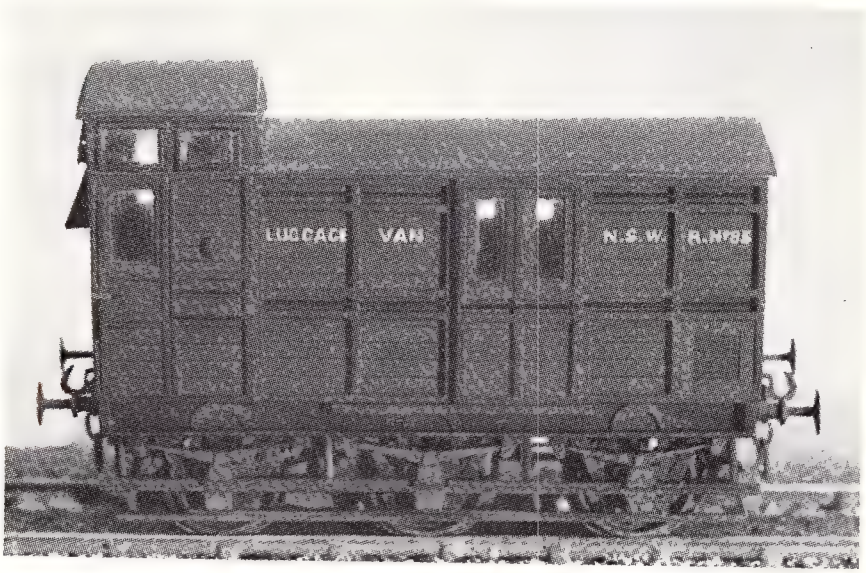
By Bill Dive

Bill Dive caused considerable comment at the S.C.M.R.A. convention in Sydney last Easter with his excellent model of an early train of the N.S.W.R. We will not say any more about the models, but leave you to admire them, through our photographs, and let Bill tell you more about them.

Engine No. 294, a second class carriage, two open trucks, a horsebox and brake van represent all the rolling stock so far completed for my proposed N.S.W.G.R. layout set in the mid 1880's. They were exhibited at the recent S.C.M.R.A. convention and I have prepared some brief notes on construction methods and materials which may be of interest.

Firstly, the prototype . . . 10 engines of the 294 class, nicknamed the "Goods Waterburys", were built by Baldwin in 1885 for the N.S.W.G.R. One writer has described them as "long, sleek and outrageously ugly, a real dachshund of a locomotive, low of wheels and low of body". In service they in no way rivalled their British built counterparts, later known as the Z25 class, and were considered deficient in boiler power.

Luggage Van also built from styrene.



No. 295 was sold to the Commonwealth Railways for use in construction work on the Trans-Australian line, while 294, 297 and 298 worked the isolated Broken Hill—Menindee line until 1927. All were scrapped in 1928.

I had an old Porter Mogul which I used for testing trackwork while my first scratch-built locomotive was under construction. I was not satisfied with the appearance of the Mogul and after studying "A Century of Locomotives" I thought it could become a K294 quite easily. When I obtained the weight diagram from the Railways I found the differences were considerable but by then the Mogul was dismantled so I had to go ahead. The chassis was channel brass and this was extended to the rear using 1/16 in. brass overlapping the channel inside. The new positions of the front and rear axles were drilled out and then slotted, as a keeper plate was used. I obtained three pair of Tenshodo (I think) driving wheels from Hobbyco, and from the centre set a wheel was removed and the old worm gear forced on. The old brass cylinders were cut off and built up with sheet brass to increase their size, and the lubricators on top were made from ball point pen tips. Coupling and connecting rods and valve gear were built up from nickel silver sheet and wire. The bodywork was made from sheet material, mainly brass, but the boiler was tinplate with brass bands soldered on, as I originally proposed to finish it as polished iron. The funnel and dome are Kemtron, turned down on a hand drill mounted in a vice, and buffers, smokebox door and other small fittings were produced by this method. The headlight is a modified Sentinel casting.

The tender body was built of sheet brass around a wooden core, a method I saw in the Model Railroader some years ago, and the underframe was formed from 1/16 in. square strip and bolsters filed from brass bar. Coal and a Sentinel water tank hatch completed the body. Bogies were built up from brass strip with axleboxes from brass bar. They are sprung and ride well although no spring movement is noticeable in running.

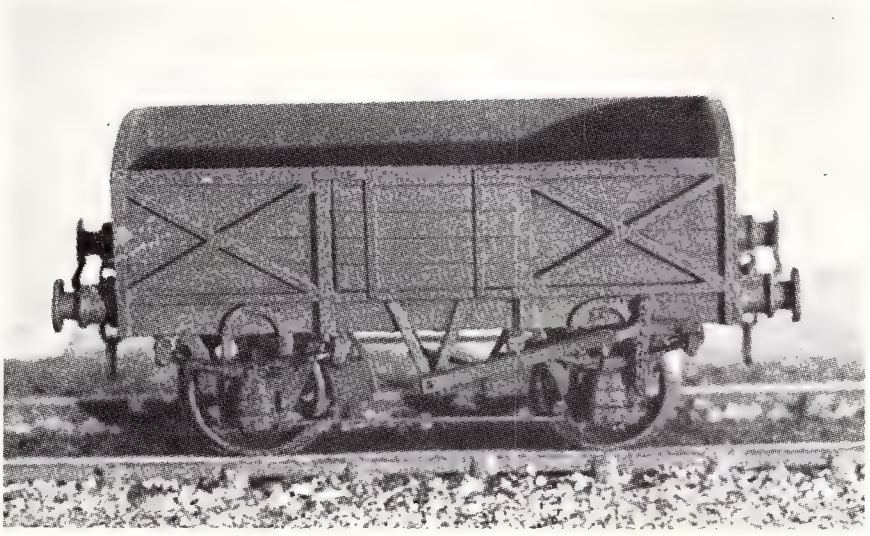
The model is painted in a dark purplish grey, which looks right under artificial lighting and does not hide detail as black does. The driver was made with water putty on a wire frame by a method shown in the Model Railroader for February, 1965 and I think he looks the part.

The rolling stock are typical vehicles of the period as seen in contemporary photographs, and plans and photographs were obtained from the Railways. The brake van and "B" truck (larger open wagon) were built from styrene sheet, which I find is very good for this purpose. A supply of Slater's Microstrip is a great time-saver and I obtained some direct from the makers, who, I was pleased to find, gave prompt and careful attention to a small order.

All vehicles have Peco axleguards and Nucro wheels, and I have had trouble-free running with this combination.

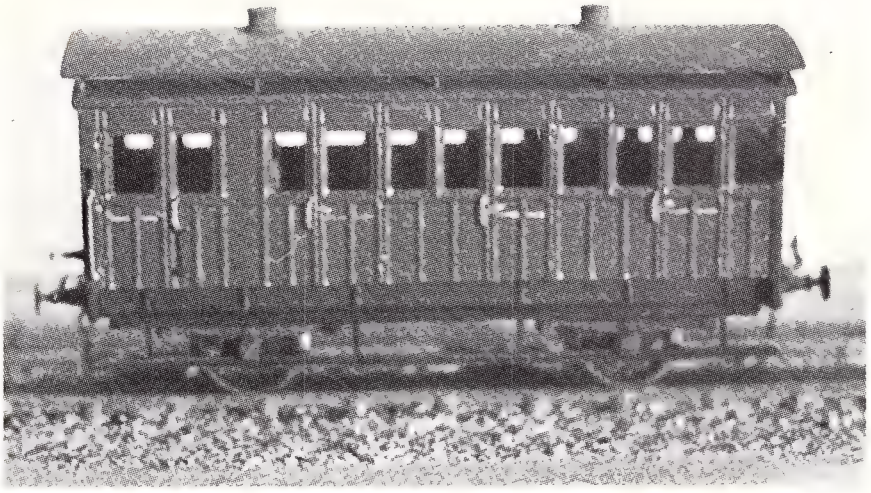
These notes are necessarily brief and leave much unsaid, but if any reader is interested in any particular part I would be prepared to go into it in greater detail.

The attractions of modelling a vintage train are well shown in our photograph.



"B" wagon in close up.

Passenger Car. Note the double roof.



MAGNIFICENT 35MM. SLIDES OF QUEENSLAND NARROW GAUGE CANE LOCOMOTIVES

No. 197 "VALDORA"

Pictured above is one of eight colour slides available of the steam locomotives which over the years have hauled the cane trams in the Nambour area of Queensland. Some of these locomotives have now been retired and pictures such as these will never again be available. All lovers of narrow gauge locomotives should have this collection of fine pictures.

Slide No. 190 "SHAY"
Slide No. 191 "BLI BLI"
Slide No. 192 "COOLUM"
Slide No. 193 "EUDLO"
Slide No. 194 "MAROOCHY"
Slide No. 195 "MORETON"
Slide No. 196 "PETRIE"
Slide No. 197 "VALDORA"

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BAJOOL TO PORT ALMA

By Kevin Ryan

Just a few miles south of Rockhampton Queensland, lies a small town called Bajool, no more than a whistle stop (if even that!) to the train passenger, or possibly a meal place for a truckie or other highway traveller, but to a Model Railroader who gets stuck there for a couple of hours, it's just like heaven. To model the whole town, railway and all, and then operate it just like the prototype could give endless hours of enjoyment. Railway-wise, Bajool is the junction from the main Queensland North Coast Line for the Port Alma branch line. As a matter of fact, the whole branch may well be modelled, shortened of course, but for operation it is ideal.

To describe train movements I will describe the experience which I had while travelling through Queensland with a friend. It was 4.30 a.m. on a cold winter's morning at Rockhampton. We had just arrived from Mackay on 20 up, a steam hauled pick up goods, only to find that the 4 a.m. Gladstone pick up which we had intended to catch had just left—minus us, but, as luck would have it, this was the morning the once a week Port Alma goods was running and we were welcomed aboard the Guards Van. Up front there was a C17 class 4-8-0 steam loco hauling four bogie flat cars, about ½ doz. four wheeled opens and four tank cars with us bringing up the rear.

We slept for the first few miles and awoke to find the train travelling through a large mud flat. Our train was on a low embankment, which was soon crossed by other embankments which enclosed square lakes. The reason for all this was explained at our first stop, where we set out the empty open trucks on the Salt Works Siding. The train made up again we pressed on to Port Alma, the end of the line.

As the name suggests it is a shipping port and has facilities to load frozen meat and general cargo. They also have a large oil depot there. While turning on the triangle the loco left the flat cars on the rather long apex, then returned to spot the tankers in the oil depot. All this completed, it was back to the van for a cuppa tea (train crews thrive on the stuff). After a railroaders' yarn around the firebox, there came a shout across the rather desolate country indicating that the tankers were full, so

Top: The main station building at Bajool.

Centre: The northern wall of the main station building at Bajool.

Bottom: Signal box at Bajool.

KEY TO BAJOOL DIAGRAM

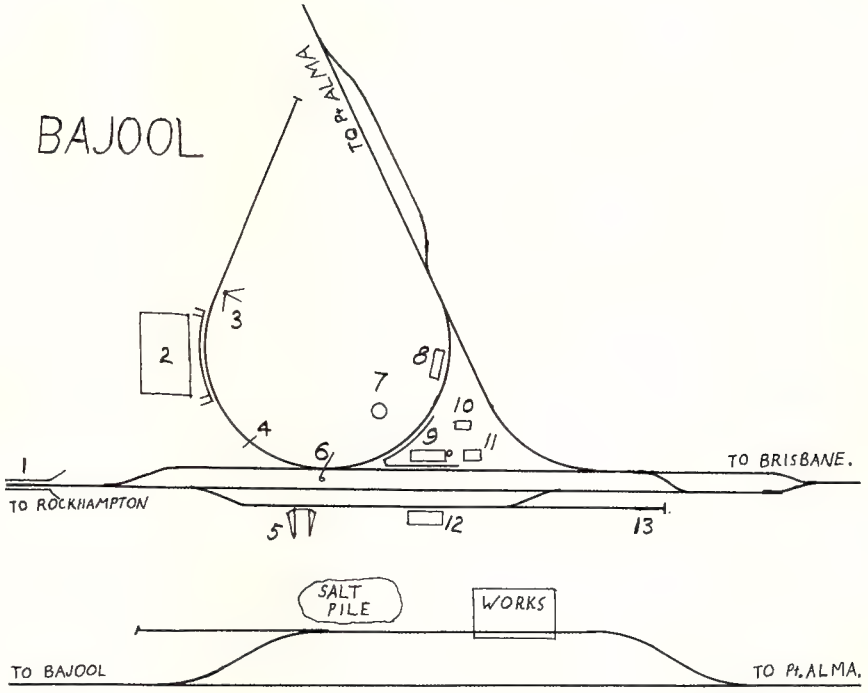
1. Trestle bridge.
2. Cattle resting paddock and platform.
3. Wooden stiff-legged crane.
4. Gate across track.
5. Loading ramp.
6. Water crane.
7. Water tank.
8. Gangers huts and store.
9. Station Master's office and waiting room.
10. Gents.
11. Signal box.
12. Goods shed and platform.
13. Flying gang campsite.

we all went over on the engine and picked them up again, re-made the train and departed. On the way back we stopped again at the salt works and picked up six or so loads, then on to Bajool where we detrained while the C17 waited in the north arm of the triangle junction as a B18¼ class pacific arrived with a load of cattle from the north, then set back into the cattle siding.

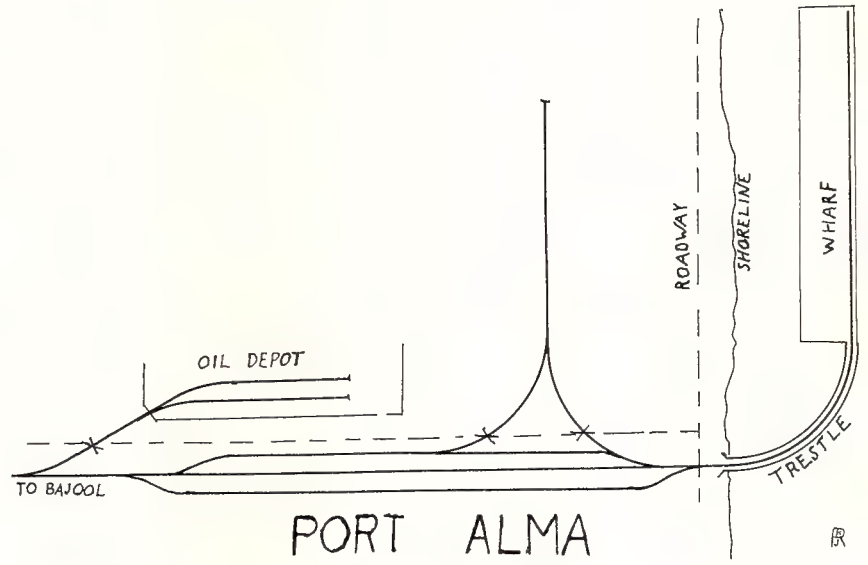
Just to keep the action going a road truck backed up the loading ramp and proceeded to tip a fine powder into a small open (F) truck. We were later informed that the substance was powdered marble. A northbound freight rumbled through, pausing only to change the "staff". After another cuppa tea and a yarn to the Station master and the passing through of a long southbound coal train, the crew of the C17 were handed the staff, then headed north.

When they were safely clear of the yard, the B18¼, having unloaded his live cargo, started back out of the cattle yard. While we partook of a combined breakfast and lunch, he turned, did the small amount of yard shunting needed before he too waited on the triangle with his empty cars for a clear path north. On the main line there seemed to be a never-ending stream of trains, the backbone of the service being coal for Gladstone, which seemed to account for about ⅓ of the traffic.

As the afternoon drew on the QR's crack express the "Sunlander" hesitated for the staff then sped on south. Rather too soon afterwards the "Rockhampton to Brisbane Mail" ground to a halt with its van in the station and we battled over the point rodding with our luggage and climbed into a passenger car, rather sorrowfully leaving Bajool behind.



SALT WORKS



PORT ALMA

REPRINTING OF ISSUE NUMBER ONE

We have received several letters asking when the reprinting of the first issue of this magazine will eventuate. Up to the present time insufficient applications have been received to make this a financial proposition. The money received from intending purchasers has been banked in a special trust account pending publication. The Editor reminds readers that a reprint of this magazine would be worthwhile having in any enthusiast's library. The price of reprints will be 80 cents each which will include the postage. So hurry up with those applications.

AUSTRALIAN MODEL CRAFT CO.

BOX 118 P.O., ALBURY, N.S.W. 2640

July 1968.

Dear Readers:

I don't know if you've ever thought about it, but you and we and everybody else who makes, handles and plays trains with Model Railway (or Railroad) equipment has some responsibilities in relation to it. It works like a yo-yo in that it goes down and then back up. First a manufacturer makes something which he sells to a distributor or a retailer, who in turn offers it to you. And you and all the other modellers are the first ones to have real responsibility. To buy it or not to buy it. I don't mean one or two maybe, but in quantity. Just whether you discharge your responsibility by buying it or not, back goes the message through your dealer to his distributor and thence to the maker. Either the product was the right one to fill a need in a required quality—or it was a flop. So anybody in the trade is in the hands of those that play trains.

Of course this is very broad, and modellers often find that they must buy something which isn't quite right in type and maybe not in quality. We for our part feel a very great responsibility to handle only good quality lines and to reject at the outset any that raise any doubts. You expect us by now to do exactly this. As far as possible we safeguard your purchases of locos, rolling stock and motors, by testing them in Australia before sale. This isn't a run-in testing, but an assurance that at least every one of them was in good working order with any superficial damage in transit (e.g., broken couplers) replaced before it leaves us. I bet you won't find too many other importers who go to this trouble, and expense.

We don't assume any right to dictate to you what you should buy—whether it be our lines or someone else's. But we do like to see you getting value for your money, and so often you can't do this by buying items merely because the price ticket makes them look like a bargain. So often all you're buying is a packet full of trouble and dissatisfaction with trains in general. We like, where possible, to get lines in sample quantities so that you can tell your dealer whether they look like the sort of item and quality you'd like to buy and that the price is about right or too high or too low (are you kiddin'?). Such way, you have to wait maybe three months before you see any real stock. We've just done this with ATT lines seen out here for the first time. Quite good, and priced about right. U.S.A. rolling stock prototypes and a few locos. Not in the Rivarossi price range of course.

Our stocks, I suppose you could say, lie mainly in the 'bits and pieces' field for the average enthusiast who buys a bit and makes a bit. Of course these 'bits and pieces' are backed in a very solid way by PECO Streamline Flexi-tracks for HO/OO, N, 9mm. Narrow Gauge and O Gauge, with their annexed ranges of points and accessories and the beautifully finished, true-to-prototype locos and rolling stock of the Rivarossi range, plus Rivarossi made Atlas branded N Gauge products, and the wizardly Arnold Rapido N Gauge range which seems to have become more extended in the structure field than in loco and rolling stock lines. So that all in all it is a very solid range of high quality products which we think fits our reputation and what you as a modeller think our responsibility is to the trade and to you.

In more recent times we've had difficulty in locating quickly sometimes a retail price for an article. How much more difficult it must be for a retail store to find such a price? So in July, first and foremost and everybody on it, we've been overhauling all our price lists, and for the first time for many years, have taken out a complete retail price list of fixed and suggested retail prices ..... copies of which we've placed in the hands of every one of our dealers. They're fully indexed and they should provide ready reference to any of our lines. These lists are not for distribution to modellers but are for 'Shop Counter Use Only' .... although of course there's nothing in them that you couldn't see. But please don't walk off with your dealer's copy.

Trying to keep up with an extensive range such as this under 34 trade brands isn't a job for a wet Sunday. This is a job that goes on day in and day out with exactitude and precision (soon get into strife if you don't do it properly). Trying to keep you informed even on the changes and new lines is quite a job, and our best contribution is our monthly "Model Railway Newsletter", which is free (except when reserved or posted) from over fifty hobby and toy shops throughout Australia. This isn't a flash affair. All it does is to tell you!

From 1st July—we've divided our stocks into groups. Four main ones being HO/OO—N, O, TT-3 and Narrow Gauge—Lines not related to gauge, with the HO/OO Group being subdivided into Group 16. Scenic Items H1, Peco 12, Rivarossi and 19, the other HO/OO not in 16, H1 nor 12. For each one of these 7 groups, we've issued partly illustrated booklets complete with price list. The booklets of the four HO/OO groups and the N Group are 5c each, and Booklet 50, which covers books, magazines, electrical items, tools, screws and raw materials, is given away free with each booklet purchased. The remaining one, covering O, TT-3 and Narrow Gauge (i.e., 9mm. and 12mm.), has a limited appeal and you may have to leave an order with your dealer and, wait for it .... and only get it if you're interested in one of those gauges. Below is a summary of what's available and your dealer should have stocks. The Group 19 is a remade booklet and won't be ready till late August, we'd think.

But always ask for your 'Newsletter' and keep up to date. We've that many new lines coming in, we don't know where to start but we will have illustrations in the Sept./Oct. issue of this magazine, at least of some of them.

Always see your dealer!

Yours sincerely,

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PECO IN AUSTRALIA No. 5 covers by illustration all sections of Peco stock including NG & N & O. Price 5c. Fills the gap where Catalogues are not available (as like now).

RIVAROSSI NEWS No. 3—profusely illustrated coverage of Rivarossi lines. Price 5c. Fills a gap when Catalogues are not available, as is the case at present.

BOOKLET 50—covers all lines in Group 5 and includes a price list. Lines covered are Books, Magazines, Electrical Lines, Tools, Materials, Screws and Nuts. No charge. Given away by dealers with every bought booklet.

BOOKLET 40—covers all of stock group 4, i.e., TT-3, O, Narrow Gauges, and incorporates a current price list. No charge. You may have to order. Of no interest to you unless you are interested in TT-3, O or Narrow Gauge (9mm. and 12mm.).

BOOKLET 30—Third Edition—covers all of N Gauge. Up-to-date price list. Booklet is 5c. Similar to Second Edition and issued in some panic due to early sell-out of second edition.

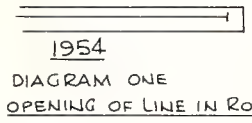
BOOKLET 160—All of HO/OO Scenic lines, seven illustrated pages and 12 pages of complete price list (July '68). Price 5c. Limited quantities available.

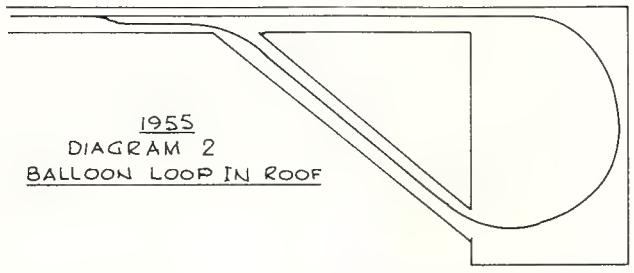
BOOKLET 190—April issued Department 11 Booklet 5c is still available which contains Romford, Gem, K's, Sentinel and Jackson lines illustrated. To this in due course will be added other HO/OO lines not Peco and not Rivarossi. Price Lists only of Peco, Rivarossi and Merten are available free from your dealer.

Golborne Junction

The Story of a Fiddle Yard

By Jack McLean





As part of the long re-construction plan for the whole of the Wingrove line, Golborne Junction was pulled up recently, giving me the opportunity to replace the old Masonite with some nice new sheets, levelling up the baseboard and at the same time redesigning the track plan.

I've been experimenting with the plan of this station for over 10 years and I have been reading about fiddle yards since they invented the term (I think) and so I thought you might like to hear of some of my inconclusive conclusions.

Can You Model a Whole Railway?

A good question. But no model railway I have ever seen has been big enough in my opinion to simulate **completely** a real railway. Conversely, no real railway I have heard of has been small enough to be modelled **completely** if anything less than a drill hall. I mean a real railway and not 100 yards of track with a title. I suppose you have heard the story of the bloke in America who owned a sawmill or a tileworks or something, and it had 100 yards of track in a siding leading to the main line of a real railway. He gave the siding a grandiose title and had some nice passes printed and sent them off to the presidents of real railways like the Pennsylvania and the New York Central and they returned the compliment. Probably enabled him to cut down his travelling expenses. Of course there came the inevitable day when the President of the Something-or-other and Pacific dropped off the main line train and asked for his pass to be honoured. The Sawmill Bloke put a lounge chair on a flat car, hitched up his horse, invited the visitor on board, and said "Giddup". Well anyway, that's the story.

I suppose you could model that sort of a railway but you will notice that it **was** connected up to something else.

Self-Contained Lines

If you look around Australia at the self-contained lines either now or in the past, you won't find anything exciting. Bellarive to Sorrell, Cooktown to Laura, Normantown to Croydon and so on. They were all far too big to model and in any case none of them seem to have run more than one train at a time—not in any time table I have ever seen anyway. From a timetable angle they had little of interest to offer. The only way that the Cooktown to Laura line would ever have got round to running an express, would have been after its connection to the rest of the Q.G.R., I reckon. My friend Ken in Brisbane would have loved to have seen the Laura Mail leaving Roma Street.

This imaginary connection of a model railway to somewhere else seems to be the basic ingredient in the Fiddle Yard. It is an unrealistic part of the model railway to work, but I think that it is necessary, to make the rest of the railway realistic. Perhaps it is the banker in the card game or maybe the directing staff of a military exercise.

Wingrove Geography

I have always imagined the Wingrove line to be a much smaller line than the isolated ones I have just mentioned, the Sawmill excepted. I used to think it was a little railway owned by a Port Authority, but handling all sorts of long distance trains from main line railways which had running rights over it. Not nearly as big as the Port of London Authority or the Bombay Port Trust, but the same idea. This self-contained quality of a railway enables it to explain away the fact that it has its own rule book and working timetable.

These days I soft pedal the Port railway idea because I realise how difficult it is to run goods trains on such a railway when I haven't got the room for the sidings.

At present too, all the motive power is owned by the Wingrove Line (you can tell this because it's painted on the sides) so maybe its like the Electric Division of the New York Central was when all the rest of that railway was steam and you couldn't bring a steam engine into New York City.

All these examples though, seem to suggest joining onto some other railway which I haven't the space or time or money (or incentive either) to build.

A Fiddle Yard

When this thought occurred to me in about 1954, the word Fiddle Yard didn't seem to be in the Model Railway vocabulary and an article I wrote around that time was returned (my pride tells me because it was ahead of its time).

The article told of the early days of Wingrove in the roof when there were only two real stations. Wingrove was a very small dead end terminus and Koongarra Creek had only one loop in which we stored trucks as well as side-tracked trains to cross others. A third (imaginary) station was called Golborne Junction but it was really only the dead end extension of the down main line from Koongarra Creek, as shown in the hardly necessary Diagram 1.

After a down train left Koongarra Creek it would run as far as it could, occasionally followed by another train and then when the operator at The Creek had time to spare, he would pick up the engine(s) and van(s) and crane shunt them onto their train(s) ready for re-entrance into the timetable.

Several objects were achieved.

1. It enabled us to run timetables with only two operators.
2. It gave us a three station railway which is the minimum on which you can get the fascination of two trains approaching a single line crossing station from opposite directions.
3. It gave the trains somewhere to go and come from, because here the Wingrove line junctioned with the other company and in imagination the railway kept on going. This alone enabled the variety of trains (express, passenger, mixed, goods and railmotor) which ran on the line even at that time.

Ashburton

In a sort of a way the Victorian Railways Ashburton Line had a dead-end fiddle yard between wars. When the line was electrified in 1924, only the main line at Ashburton was wired, although the goods sidings remained for steam trains. The wire extended several hundred yards beyond the station towards Waverley Road and for many years, electric trains were stored on this piece of track overnight. During weekdays from about 1928, the off-peak service was maintained by an A.B.M. car (first class—second class—dog box—with a driving compartment at each end) to which a D car driving trailer was attached when necessary. Most of the day, a second A.B.M. car (and driving trailer when necessary) was added, these two A.B.M. & D. trains crossing every quarter hour at the island platform crossing station at Hartwell. When the second A.B.M. & D. was not needed it was stored in the Ashburton dead-end.

The peak was carried by seven car electric through trains from Flinders Street, one of which went off at Ashburton and came on again the next morning. This seven car train was also stored away in the dead-end.

So, overnight in the siding from the buffer-end, there would be the less-used A.B.M. & D., then the seven car train

and then the more-used A.B.M. & D.

This was back in the times of late night trading and every Friday night the seven car train would make a trip into Flinders Street so that it could return to Ashburton about 9.20 p.m. with tired shop assistants. At the time of the seven cars return, the A.B.M. would otherwise have been standing in Ashburton platform and so the A.B.M. had to make a smart trip up to Hartwell to cross the seven car train and then follow it back to Ashburton and in this way the three trains were once again in their correct order to be stacked away.

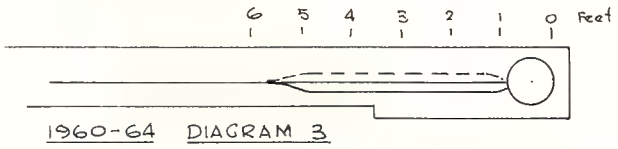
The Balloon Loop

It wasn't long though before my railway was financial enough to buy the track for a balloon loop and the balloon loop was sectionalised to hold three trains. It was single track and so it was a case of first in, first out, as you can see from Diagram 2. This posed a new problem, which I don't think any railway has ever been called on to solve; i.e., how to ensure that the first train timetabled in was the first timetabled out and so on. I invented a graphical method of my own for the purpose, but the graph didn't help the situation when trains were running late and got stacked away in the wrong order. For instance if the express was supposed to leave Wingrove ahead of the passenger train it would enter the balloon ahead of it and in consequence it would have to be tabled out of the balloon ahead of it. Occasionally, however, the express might run late, a likely reason being difficulty in turning the engine. The passenger train might then very well be put into the balloon ahead of the express, and as the passenger train couldn't leave Golborne Junction ahead of time, the express behind it would just have to run late.

This was explained away by the story that the other railway was pretty uncooperative and didn't really want anything to do with us. They didn't care when we got our trains back. We were lucky to get them back at all!

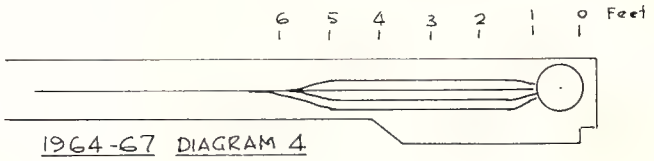
The Garage Era

When writing about Wingrove, you may remember that the balloon loop was never rebuilt in the garage. There wasn't enough room. The turntable which had been at Wingrove in the roof was later put in at Golborne Junction in the garage. It served two purposes. Placed at the end of the station and therefore at the end of the line, points and space were saved. And it was also the imaginary loco depot for the railway to which light engines had to run to turn.



1960-64 DIAGRAM 3

At first, there were only two tracks and the operator had to be careful to run round the first train before the arrival of the second. When the third track was put in, the up-end point was replaced by a Shinohara three way. And it was not long before a fourth track was put in and the layout stayed this way for perhaps three years. This is shown in Diagrams 3 and 4.



1964-67 DIAGRAM 4

Unrealistic?

It was unrealistic, as fiddle yards are almost certain to be, I suppose, but it **was** possible to run the place without cheating. No crane shunting, no hand shunting and with a bit of luck the electrical sectioning sufficed. However, it had serious limitations.

Firstly it didn't allow any shunting of goods trains to take place. It was hard enough to reverse an engine and van. There was no place to leave spare goods trucks and passenger cars either.

Secondly, all trains were limited to five cars and an engine. The station couldn't be extended towards Koongarra Creek—it was too close already. The only way to take out the turntable and make the fiddle yard into plain dead-end sidings. And we mightn't like it. A decision was avoided when the Airfix turntable fell to bits and so the sidings were extended by laying them temporarily over the turntable pit. Almost at the same time, the track nearest the operator was taken out and made into a sort of a branch line close to the edge of the base board where a loop siding was put in. This new area was called Golborne Town in contrast to Golborne Junction which was the rest of the place; i.e., the imaginary junction with other railways.

Crane Shunting

We soon got used to crane shunting the express and the mail and the allegedly fast goods and we liked Golborne Town especially when it was rehashed as a two platform station with a dead-end goods siding.

We could now run terminating passenger trains, and also terminating goods trains could leave trucks there. The operator had a fair bit to do and the Town station was much more realistic to work than the old Junction had been.

Rebuilding

Recently, the baseboard was levelled off, a new sheet of Masonite replacing the old chopped up sheet, and the track relaid to a new location which was allowed by the baseboard being slightly enlarged where shown in Diagram 5. The plan of the station is very little altered, the fiddle yard being moved

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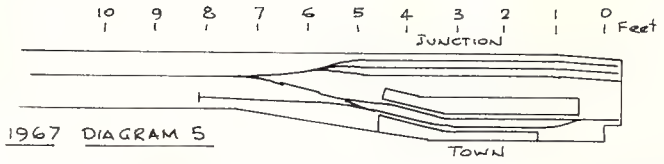

1967 DIAGRAM 5

back parallel to the back sheet and the Town station being moved forward more or less parallel to the front of the base board, as shown in Diagram 5.

You will see that there is enough room between the fiddle yard and the Town for two more parallel sidings in the fiddle yard and the Town will get another dead-end goods siding one of these days.

What's Beyond Golborne?

I am never quite sure what is beyond Golborne. I usually say vaguely that the trains keep on going so that tomorrow morning perhaps they get to Adelaide which shows up my Victorian bias. Other operators I feel sure have other ideas. But does it matter much? In answer. I refer to a very interesting night out at Deer Park recently, when the hospitality of the A.S.M. was only matched by the confident and efficient manner in which he ran the station. The up Ballarat Race Special and the down Bacchus Marsh railmotor arrived simultaneously, and the A.S.M. had to take the key to the up end to turn the motor into the loop while the Race Special was calling impatiently for the up home. When the motor was in the clear the Race Special was admitted to the station but came in far too fast and the fireman failed to pick up the Sunshine staff because he was more anxious to tell us that the up distant light was out. The staff nearly went under the train. but the A.S.M. was unmoved by the near tragedy which called for a fleet-footed run in the dark down to the diesel stopped by this time near the level crossing. The railmotor was let out through the down end key locked points and the A.S.M. walked back in the dark just in time to clear off the Race Special at Sunshine and give him a peg for the down Mildura Fruit Flyer. The Fruity arrived at Deer Park before the motor had cleared Rockbank and so the A.S.M. brought the Fruity into the platform to wait line clear. We commented on the light load of the Fruity as it was only about eight bogies and a van, and after the exemplary train working so far, we were surprised when the A.S.M. said it would probably be built up, at **Ararat.**

In my best How To Win Friends style, I suggested that as it was a Mildura train it would be branching off at North Ballarat and the A.S.M. said, "Well that just goes to show you. You can learn something every day. I don't mind what happens to them after they reach Rockbank". So that if he doesn't have to know (or care) what happens beyond Sunshine and Rockbank, why should we care what happens to the Wingrove trains after they reach Golborne Junction.

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THE RAILWAY HOBBY IN JAPAN

by P. DUCKETT

Being such a 'railway country', it would not be rash to suggest that the average boy in Japan would be more 'railway-minded' than most youth elsewhere, but against this, past economy has limited modelling activity and it is only in comparatively recent years that the skilled manufacturers have become interested in up-grading domestic products to approximate the standard required for export lines.

With weekly pay envelopes gradually enabling wider selectivity, interest in model railroading has received great impetus and coupled with increasing interest in the home market by manufacturers, some of which previously made for export only, the latest development in retail outlets is the appearance of foreign model railway goods! The economy now permitting the entry of Marklin, Hornby and other brands long well known in Australia.

Thus, the Japanese enthusiast has never had it better and with power through numbers, we might take comfort from the fact that the surge on the home market will increase the potential and plant of the manufacturers, with consequent improvement alike for export and domestic products.

Some changes are inevitable and with the upsurge in domestic economy and interest combining with Japanese railway progress, where a manufacturer is also operating retail premises, such as Tenshodo, it is obvious that the greater unit earning power of retail sales across the counter may reduce interest in products which have to meet the minimum price requirements for export.

Manufacturing technique in the scale locomotive plants would be of great interest to the average Australian model railroader: Procedure generally calls for each plant to concentrate on the assembly of a single type of model whilst parts are made, or procured from sub-contractors, for the next model to be put in hand.

Assembly undoubtedly occupies the greatest number of hands; aside from highly technical operations, practically all work is performed by girls whose dexterous ability with their hands is quite incredible to the visitor.

By way of simple example, boiler hand-rails which embrace both sides of the boiler shell, as well as the smoke box door, are often required in a one-piece form. More often than not, requiring an involved shape to clear superstructure hardware, etc.

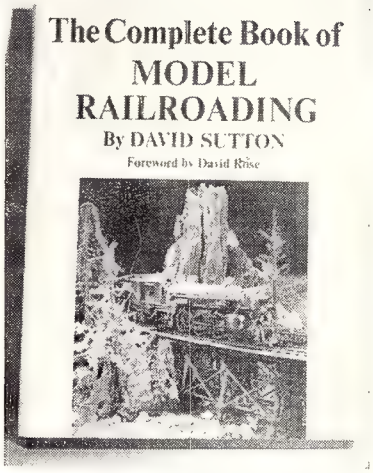
These hand-rails must be cut out and formed entirely by hand and as the 'scratch' builder would appreciate, one kink or dimension miscalculated by girls on this work would result in a progressive error and ultimate rejection.

The idea that Japan is full of such skilful hands which can be cheaply employed is as erroneous as the theory that a bus is a better vehicle than a tram, and it is a matter for record that those requiring skilled labour are now faced with odds intolerable by standards in this country.

'Sony' and other large industrial groups offering lavish working conditions, with a five-day week on a six-day pay, the time is long gone when such as the scale lomotive plants were free of staff problems.

Accordingly, most have had to build dormitories, provide cooks, etc., and then recruit suitable labour in the country districts. Some of the expense and problems of which can be imagined upon even the most cursory reflection.

With the snowballing industrialisation of Japan, a growing economy and rising cost factors, it is recognised by trade authorities that just as surely as the cultivated lands of Japan are disappearing beneath the factories, so this country will benefit with increasing primary and mineral exports to Japan, until the latter becomes our largest single customer. A state of affairs already fast approaching.



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What's more, the author has "deliberately included the names of manufacturers and/or sources of supply, and in some cases has listed parts numbers and catalogue references for the express purpose of making it easier for you, the reader, to be able to track down a particular item or piece of equipment which either strikes your fancy or is important to your model railroading operation. While this may possibly appear commercial in one respect or another, you will find it a definite aid when you visit a hobby shop and attempt to describe a particular item you wish to purchase."

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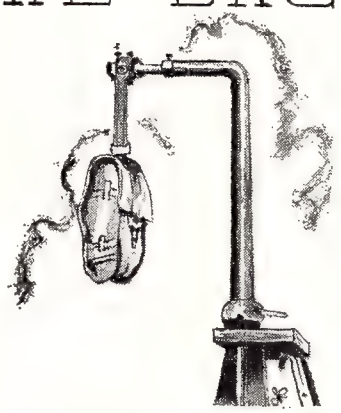


Sir,

It has been evident for quite a while the growing interest in Australian prototype in relation to model railways, and it is with this in mind that I would like to make the follow-suggestion. The interest shown has resulted in three locomotives being manufactured to the amount of realism required by most modellers. These are, of course, the N.S.W.G.R. 38 and 60 class and Victorian R class. My suggestion is the N.S.W.G.R. 44 class DE or 930 class of the S.A.R.

Now I can almost hear the grumbles of steam fans everywhere but let's face it, diesels are here and most of us model present day railways. I might point out here that I am an out-and-out steam fan myself but let's take a look at the reasons for and against. Because of their simple outside appearance against that of a steam engine, the castings for loco bodies would be cheaper and easier so far as the manufacture is concerned.

The cost of all brass, Japanese-built masterpieces is, of course, well above the working man's pocket, and surely if enough interest is shown, a model of a diesel could be produced at a more reasonable price, to attract both the family man and the dedicated enthusiast.

Now, over here in South Australia 930 class Alco's are used for just about every purpose from 3-car suburban trains, ballast trains, work trains, branch line passenger and freight trains to triple headed on the "Jet" freight to Melbourne. This letter could also be written about the 48 N.S.W. class and 830 S.A.R. counterpart which, incidentally, is used on both broad and narrow gauge.

I feel, too, we must concentrate on the types of loco used by more than one system to attract more customers, so I hope there are some other fellow modellers who will agree with me and push for a cheaper, but still of good quality and correct to NMRA standards, more universally used locomotive. No doubt I can expect a few answers to this letter, but this is the only way for manufacturers to find out our requirements. Incidentally, what about some bogie exchange vehicles which can be used on layouts of our State. For those interested, the "Crown" band gondala measures out in HO scale directly to an OB class gondola of the S.A.R. which could be used on bogie exchange and therefore used on many systems.

ROBERT PERKINS

Belair, S.A.

HELP
LEGACY
all the year
round

Sir,

Judging by the great swag of prototype articles in the magazine lately the supply of modelling material seems to have stopped. This probably reflects the Australian "blow you, Jack, I'm all right" attitude.

As a considerable amount of scratch-building and kit-bashing is being done in this country I would say that there should be no lack of material for your magazine. Writing articles is quite easy and only needs a little thought and care. One suggestion that I should like to make is that all articles on prototype equipment or station layouts have a decent plan of the equipment or station. Thus, articles such as the S.A.R. sleeping cars, N.S.W. wheat hoppers, and Flexivans would be of use to modellers not just space filling.

The average modeller is more concerned with the length and size of the vehicle and not with its tare weight in 12 inch to the foot scale.

RODNEY J. TONKIN

Oatley, N.S.W.

Sir,

We refer to your closing remarks on N.Z. visit re doing your utmost to support a convention in Australia, and would like to refer you to our letters to both the SCMRA and your publication, dating back to February and March, 1968, wherein we mentioned an international convention to be held over 10 days of Moomba time in March, 1970. To date the only "help" we have received from SCMRA and yourself is a suggestion that we buy advertising space in AMRM. Mention was made of our convention letter by Canberra Model Railway Club in your "other clubs" segment—yet our club report containing this news was not printed.

Overseas publications (Model Railroader, RMC, Footplate, etc.) and AMRA Journal have all backed this convention—but not AMRM. It seems strange we in Australia have to use overseas magazines to get the help we should get from our local efforts.

I doubt you will print this letter, but we must state our feelings anyway, and would appreciate your explanation of what "your utmost to support such a venture" means.

TED FROST

Hon. Secretary

Melbourne Model Railway Society

Boronia, Vic.

In reply may I point out that we print all letters dealing with the model railway hobby that we receive unless they are routine ones such as renewal of subscriptions or the writer specially asks us not to publish his correspondence, or if it contains defamatory matter.

My New Zealand report, which included my promise to do "my utmost to support such a venture" referred to a convention during the year 1969 as the New Zealanders indicated that a 1970 convention in this country would clash with their own biennial convention next to be held in Christchurch.

Again may I say that we publish all club notes that come to hand as I am of the opinion that we receive too few despite frequent appeals to club secretaries. The more clubs are publicised the easier it is for readers to find the nearest club to their place of residence.

We are only too pleased to print news of exhibitions and conventions in our pages and examples of this may be seen in both in this issue (Yagoona) and last issue (Brisbane). However, this journal is not a benevolent institution and we feel that the committees of large conventions or exhibitions do benefit from an eye-catching advertisement in our pages. In past years the Australian Model Railway Association has announced its October exhibition in Sydney with great success. However, I feel that as this Mail Bag column is one of the most read parts of this magazine this will serve as a stimulus to readers to attend your convention.

Sir,

I am a regular reader of your magazine, and I find your publication quite interesting and helpful. In your last issue (No. 32) I was surprised to find your Shop Detective reporting about articles of which he admits he knows nothing. If he knew his job, he would know that Hans Heinzl (not Heinzel) K.G. is a well-known manufacturer of high class models and accessories for HO and O gauge. Those odd looking locos and railbuses, as he calls them, have a very high historical value, each in its own right. I feel that if your Shop Detective can't see anything on a model apart from the deep flanges, he would be better to say nothing at all. It seems that unless something is English or American, some people just put it aside and call it odd looking. There is plenty of odd looking rolling stock in this country, too, but we still take an interest in it, and in most cases, know more about the oddities than we do about the regular types. As railway modellers we should not stop at our borders—other people have railways, too.

MAX SAYER

Appila, S.A.

Apart from his incorrect spelling of the product name we consider our Shop Detective in Melbourne is doing a fine job because letters such as yours show that his reports are read. We have attempted to have a Shop Detective in each of the capital cities in Australia but our Melbourne one is the only reporter with regular news. There is a vacancy for this position in South Australia and we would welcome applications for the position from such keen-eyed modellers as yourself.—Ed.

Sir,

Paul Rogers, in his letter appearing in the May/June 1968 issue of the AMRM, has corrected many of the mistakes which appeared in his earlier article on the C.36 class locomotives of the N.S.W.G.R. However, he continues to be in error when he states in his letter that 3636 is being retained for rail fan excursions. This locomotive was actually sent to scrap on 31st July, 1967.

3616, the loco used on the SCMRA's excursion to Wyong on Easter Sunday, is actually the "36" class which has been retained in traffic condition by the N.S.W.G.R. for fan excursions. The only other "36" class in service at the time, 3638, would have been in use on the Sundays only Moss Vale to Sydney via Hill Top passenger.

The number of "pigs" being returned to general traffic is now being increased to six, as it is intended that three will be sent north to Broadmeadow to allow the last of the older "C.35" class to be withdrawn from regular general service.

PETER NEVE

George Street, North, N.S.W.

Sir,

I have started to model the Oberon terminus described in the last issue. However, progress has been halted through lack of information.

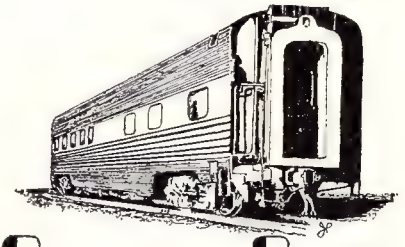
I need information on such things as goods train timetables, signalling and structures at and around the station, like the loco depot, coal dump, goods crane, cattle siding and the CSR building.

Can any readers help? Any diagrams, drawings, photographs or any piece of information would be gratefully received.

Also, does anyone have or know where I could get a list of all the code letters and what they mean for rolling stock on the N.S.W.G.R.?

RON GOODRICK

Keiraville, N.S.W.



CLUB CAR

SCMRA NEWS

Secretary: TERENCE N. CARPENTER, P.O. Box 107, Lakemba, N.S.W. 2195. ALL CORRESPONDENCE SHOULD BE ADDRESSED TO THE SECRETARY

SCMRA MEMBERSHIP DUES

For your convenience, dues may be paid into any branch of the Bank of New South Wales and remitted to Penrith, N.S.W. in favour of the "Southern Cross Model Railway Association" using a *Savings bank cheque account* deposit slip. The deposit slip with your name on reverse side and/or correspondence re membership should be sent to the following address:

The Secretary, P.O. Box 107, Lakemba, N.S.W. 2195.

Joining Fee $2.00. Family Member $1.00. Regular Dues $4.00 p.a. Sustaining Member $10.00 p.a. 5 Years (lump sum) $16.00. Cheques, money orders or postal notes should be used and made payable to "SCMRA".

EASTERN DIVISION

Future meetings are as follows:

August 10: All members will attend the SCMRA Annual General Meeting at YMCA, 325 Pitt St., Sydney at 2.00 p.m.

September 14: Ellis Eyre, 76 Noble St., Hurstville.

October 12: Bruce Tompson, 17 Patricia St., Westmead.

CLUBS

CENTRAL COAST MODEL RAILWAY CLUB. Secretary: W. Cleary, 83 Holden St., Gosford, N.S.W. 2250.

Work is proceeding on our new layout and we have now completed track laying, with a start now being made on the scenery. The layout, when completed, will be a model of Hawkesbury River Station and township prior to electrification. Kevin Ryan has built a fine model of the coaling stage from photographs he and another club member, Grahame Williams, took some time ago. We have had much discussion as to the best way to "make" water for the bay sections as this will be one of the most important parts of the scenery.

On June 13 we had an outstanding running night to which the Boy Scouts were invited, along with their scoutmaster Mr. Bill Ross. On this night club members were asked to bring a friend along with them. Three very interested visitors were Mr. Len Lean, Mr. Barry Quigley and Mr. Ron Woodlands, who have the "bug" and we hope are to be potential new members. On this night we had approximately 30 people present, the highest number to be present in the club rooms on a Thursday night for approximately 3½ years, which was very encouraging.

It is with regret that I write we were advised by Grahame Williams on Thursday night that he has been notified that he is to be transferred to Queanbeyan and we are losing one of the best Australian prototype modellers we have in our club. I feel sure that the club won't be the same without his very fine equipment. Fellow members and myself wish Grahame and his wife Judy and family all the very best of luck and good health in taking up their new appointment in Queanbeyan.

I would like to extend an invitation to any person interested to attend our club meetings, which are held every Thursday night at 8 p.m., as we are very glad to see new faces as it is good encouragement for our regular members.

WOLLONGONG MODEL RAILWAY CLUB. Club Representative: 71A Campbell St., Wollongong, N.S.W. 2500.

Looking over progress we have made over the past 6 months or so, it has been (for once) rewarding. Both steam and diesel facilities are well on the way to completion, a new mining spur built and it looks as though the bulk of the exhibition layout will be finished by August.

Most of our efforts have been going into our exhibition layout. Originally intended as a modest 2-oval job with a higher-level loop we now have 4 ovals that can run 5 to 6 trains independently. We hope it will be ideal for exhibition purposes with fully automatic train control so that one man (we hope) can run the whole exhibit if necessary. With careful selection of rolling stock the layout should be trouble-free, at least we will strive for it.

If the Editor permits we will take this opportunity to remand you once again of the Annual Wollongong Police Citizens Boys' Club Models and Hobbies Exhibition on August 24 and 25.

N.M.R.A. member and ex-member of Blacktown Model Railway Club is Peter Jensen. Peter's job required him to move to Wollongong at the beginning of the year and after seeing our item in this column (please note club secretaries: "Pays to advertise!") enquired and promptly joined us.

Two of our members, Don Marey and Lyndon Spence, took part in the Easter Tour of New Zealand made by the N.S.W. Rail Transport Museum. Both are also keen members of the local camera club and so considerably contributed to Mr. Kodak's personal charity.

There is, by the way, a certain armed camp developing in the club. This faction has the strange idea that diesel power will replace steam. One member especially is accumulating a large diesel roster, but he's got quite a way to go if he's going to outrank fellow member Bodo Schwarz's 75-loco pro-steam roster. Long after even King Diesel has his day. I've a feeling that steam will remain supreme on the W.M.R.C.!

THE CANBERRA MODEL RAILWAY CLUB. Secretary: E. W. O'Halloran, 3 Jersey Street, Deakin, A.C.T. 2600. Phone 81-1774.

The June meeting was held at the home of Ted O'Halloran and was attended by 14 members and 2 visitors.

The heads of the working groups told of the good progress on the club layout. The scenic work is nearing completion and the construction of the main control panel is proceeding according to plan.

After the business meeting the first auction of members' surplus equipment was held. This was quite successful for a first attempt and the commissions received will help augment club funds.

Meetings are held on the first Wednesday of each month and prospective members and/or visitors are always welcome. Any time you are in the National Capital give our Secretary a ring and he will arrange for you to meet all or any of us as you desire.

The 1968 Annual General Meeting was held at the home of Dick Hinder on Wednesday, July 3.

In presenting his Annual Report the President commented on the successful year enjoyed by the club. He detailed the progress made on the club layout and thanked the Committee for their support in the past year.

In accordance with the rules all offices were vacated, and under the Chairmanship of Norm Cooper, the election of new office bearers began

Officers elected for the coming year are:—

President: Charles Bennett.
Vice-Presidents: Norm Bowkett, Bruce Block.
Secretary: Ted O'Halloran.
Treasurer: Jack Richardson.
Publicity Officer: Howard Armstrong.
Librarian: Fred Holloway.

At the conclusion of the Annual General Meeting the regular monthly meeting was held, with the newly elected officers taking their places. When formalities were completed an inspection was made of our host's layout. Dick is working to Australian prototype, and is a strong advocate of complete uniformity of gauge for our country. His layout is thus the happy home for N.S.W., Victorian, Queensland and Commonwealth Railways vehicles, and he hopes soon to add some items from the missing States.

Our meetings are held on the first Wednesday of each month and visitors are always welcome. If you are planning a visit to the National Capital and would like to talk trains, a call to our Secretary at the number above or at 61-2634 between 9 and 4.45 is all that is necessary. He will do the rest.

FLINDERS MODEL RAILWAY SOCIETY. Secretary: Keith A. Nelson, 580 Blackburn Rd., Mt. Waverley, Vic. 3149.

On a cold overcast Sunday morning, May 5, members met at Yarra Junction on the now closed Lyledale-Warburton line.

The junction was once a busy area, where a 3 ft. line went to Powelltown, a hardwood timber mill centre. Powelltown was the hub of a number of small railway lines engaged in hauling timber; these railways varied from wood tracks and chutes to conventional lines. Some remains can be seen but most have disappeared in the lush undergrowth.

From Yarra Junction we traced the line which mainly follows the roadside, some embankments and cuttings remain.

At Powelltown we met the caretaker of the mill, who has been living in the area for over 35 years, and he showed us around. There are not many remains, but a few old rails are used, also some rolling stock. A tractor with over-sized flanged wheels, to enable it to operate on wooden rails, stands idle at the side of an old shed. We spent some time looking over it while the caretaker told us of some of his exploits in his youth relating to some of the mills further up in the hills.

Most of the afternoon was spent driving along bush tracks finding old mill sites, from these we were able to trace the lines, usually leading back down into the valley floors. On some of these trips we came across trestle bridges, also wide flanged wheels. Long lengths of steel cable could be found under the undergrowth. Probably these were used to haul logs up the long wooden tracks to the mills.

On June 1 the meeting was held at the Secretary's home, where we were pleased to see a large number of members present.

A great deal of interest was shown when Charlie Huggard spoke of having a dinner outing followed by a show in November.

The Puffin' Billy Society has asked for help to restore one of the locos at the Menzies' Creek Museum. This was discussed at the

meeting and it was decided to spend one or more Sundays a month, depending on the weather.

The Passenger Car competition was judged by Russ Siddall and Jim Blaney, who took some time in coming to a decision and came up with a draw between Ian Weickhardt and Charlie Huggard.

After a cuppa we adjourned under the house where the Secretary has a layout in a room 24 ft. x 7 ft. 6 in. and we tried out the rolling stock which some members brought along. Some faults were soon found in the trackwork which is not quite complete.

Meetings will be held at the following homes:
7th September: Kevin Jordan, 16 Failmer St., Clayton.
5th October: Russ Siddall, 22 North Rd., Brighton.

EXHIBITIONS

The Yagoona Model Railway Club will soon be holding two exhibitions. The first will be held at Chullora Primary School, Waterloo Road, Greenacre, on Saturday, 28th September, 1968, commencing at 11 a.m. and finishing approximately at 5 p.m. The second will be held on Friday, 18th October, from 6.30 p.m. to 9 p.m., and Saturday, 19th October, from 8.30 a.m. to 5 p.m. at the Yagoona Presbyterian Church, 10 Church Road, Yagoona.

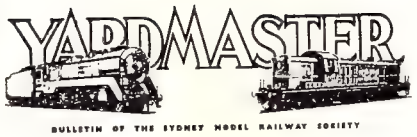
The club's revised layout is 42 feet long in HO/OO scale and is made up of four sections, each of which is part of our members' own layout. When jointed together, these sections merge into one continuous unit, showing how proprietary model trains of almost all types may be used together to run smoothly.

A small counry town is connected to a harbour with associated installations by a main station with yards and terminal buildings. All trackwork and points are Peco Streamline and Thyristor controllers are used for all slow speed working.

Adding interest to the exhibition are several small layouts, including Mr. Shambler's N gauge.

ANNOUNCEMENT

Formation of Model Railway Club in Sydney Lower North Shore area. Would anyone who is interested in joining a Model Railway Club in this area please contact David Gallaway, 35 Illiliwa Street, Cremorne, 2090. Telephone 90-2964.



Two interesting sidelights have emerged from the extensive third-rail replacement programme on the Society's O gauge layout which have created comment. The first is the fall-off of O gauge members' attendance and the other is the drift, on occasions, to the HO fold, especially when vacancies occur on control positions owing to too few HO men turning up.

Obviously, many O gauge men (and HO gauge, too) are more interested in building models rather than layout construction work and find the absence of operation and opportunities to run their own models during the reconstruction as being unattractive and not worth while attending. A little more assistance on the O gauge layout by those members wouldn't go amiss and would get the programme completed a lot sooner.

The same situation marked the doldrums which occurred on the HO layout last year during the additions to that section and the list of absentees was enough to leave the main jobs in the hands of about half a dozen old reliables.

The HO layout now must represent one of the largest in Australia if not the largest both in length, number of points, control equipment and locomotives and rolling stock, particularly of the N.S.W.G.R. prototypes. Speaking of the last mentioned six only of the full HO membership can muster four 60 class, six 38 class, two 57s, one 36, three 32s, two 50s, a 55, a 26, a 30 and others, plus numerous diesels. Due mainly to the prolific output of Arthur Wheatley and Dennis Sherring there are over 100 LLVs, BCWs, MRCs, MBCs, TRCs, and other freight stock plus a couple of dozen goods guards vans of the LHG, MHG, PHG and SHG types.

In the passenger stock groups are 28 in the TAM, MBE and similar 75 ft. types, and numerous earlier classes such as the LFXs, and later codings and three 4-car suburban electric sets. While these don't appear simultaneously on the layout they are available for appearance on special occasions when the line-up makes an impressive sight.

Recent HO activities include several entertaining timetable operation sessions which have seen Bob Brewer, Barry Millner, Lionel Glendenning, Ken Smith, Arthur Wheatley, Dennis Sherring, John Wheeler, George Wells, Frank Shennen, Max Burke, Frank Maxwell and some 'O' gauge refugees at the control boards.

HO Activities

It was found that restrictions on the Witts End-Valley-Plateau line were desirable and that only short passenger cars be rostered on trains such as Tri-ang clerestory roof coaches or short Varney 'Pug' passenger cars and only light 0-6-0 or 0-8-0 tank or tender type locos which can negotiate 16 in. radius curves to pull up the 1 in 20 grade out of the Valley to Plateau be used, and then only a load of 4 goods wagons or 2 passenger cars be rostered.

Arthur Wheatley recently arrived with 20 LLVs in his train case. These were seen later running around Witts End loop for all to admire and after being worked up to Central Goods yard where they were rostered into the goods consist of trains. Lately, Dennis Sherring and Barry Millner have been occupied installing junction boxes for electric wiring from signals to relays and control boards and Dennis has provided a box full of coloured lights signals to be suitably placed to control train running.

Barry Millner has also been busy drafting up the length of sidings at stations on layout to learn how many goods wagons can be accommodated relating to his new timetable. Also, he has programmed the station details onto cards, which will give all the information needed to follow the timetable. Dennis recently displayed his latest efforts. These were MBCs and MRCs made from the rubber mould method.

The MBCs were painted black. The MRCs were of two types, one painted black and with 4 ice hatches and the other type white with 8 hatches; all were fitted with rivetted bogies. The consist of his goods train was his smart 44 class diesel, an LLV, a MBC, a BCW, and the two types of MRC. All congratulated this enterprising member on his fine efforts. Arthur Wheatley also produced his PHG guards van to be used in traffic. This model was made from balsa wood and was beautifully detailed. Sid Lothian showed us the progress he has made in making a N.S.W.G.R. rail motor (old type) from brass. This was a beautifully produced model. Arthur Wheatley enhanced his prowess with another fine piece of N.S.W. rolling stock in the form of 6 SHGs, all nicely detailed even to the white triangle on the end of the vans. They were allotted to central goods where they were attached to the scheduled goods trains which are assuming more and more N.S.W.G.R. likeness.

Dennis Sherring has now completed the installation of control board lights to indicate on Junction the lay of points on "Arthur's Loop" on the north eastern main. Dennis is now engaged on building a series of N.S.W.G.R. old style HFO, etc., suburban cars, and displayed the half-completed rubber moulded sides and ends at our last meeting. A new HO member accepted is Mike McCormack.

NOTICE

Will Mr. D. White of Yagoona, N.S.W., send his full address to the Editor who is holding a letter addressed to him from a reader?

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"OO" Gauge Layout 12 ft. x 6 ft. on timber frame, 120 ft. track, 14 electric points, 4 locos, rolling stock, extensive scenery incl. mountains, illuminated shunting yard, engine and carriage sheds, etc., also separate "O" gauge layout originally around 15 ft. x 12 ft. shed with 3 locos, hand-made rolling stock, etc., must sell, reasonable offers. Mason 58-9482 (home), 648-1711 (work). 1 Northbrook Street, Bexley, N.S.W. 2207.

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AUSTRALASIAN Model Railroad Magazines. October-November, 1963, December, 1963—January, 1964. State price. Phone 709-2337. 50 Worland Street, Yagoona. 2199.

RAILWAY Modeller. Jan., March, Aug., Sept., Oct., Nov., Dec., 1965; Jan, Feb., March, Aug., Nov., Dec., 1966. H. G. Armstrong, 3 Curlewis Crescent, Garran 2605., A.C.T.

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DEADLINE
NEXT ISSUE CLOSES SEPTEMBER 1

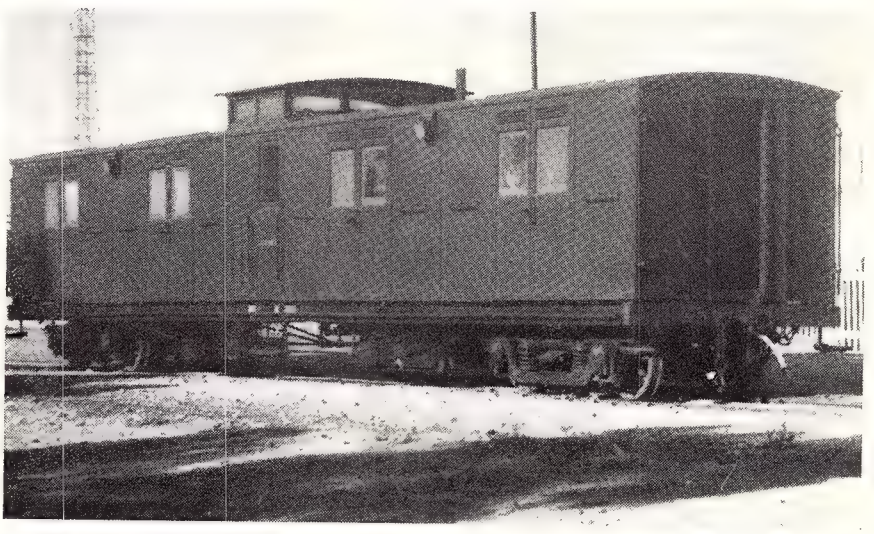
SAR PASSENGER BRAKE VAN

These ten vans were built in the Islington shops of the S.A.R. in 1913-1914.

They have worked on the various 3ft. 6in. gauge divisions since, but are now in the Peterborough division where they work on the Broken Hill line and on various rail car services. End doors were not originally fitted and were installed for use with the rail cars. Vans 204-206 were jointly owned by the Commonwealth and South Australian Railways for use on the East West Expresses between Terowie and Port Augusta.

Photo taken at the Sulphide station of the Silverton Tramway, Broken Hill, N.S.W., in July, 1967.

(Photo and plan by Norm Coughlan)



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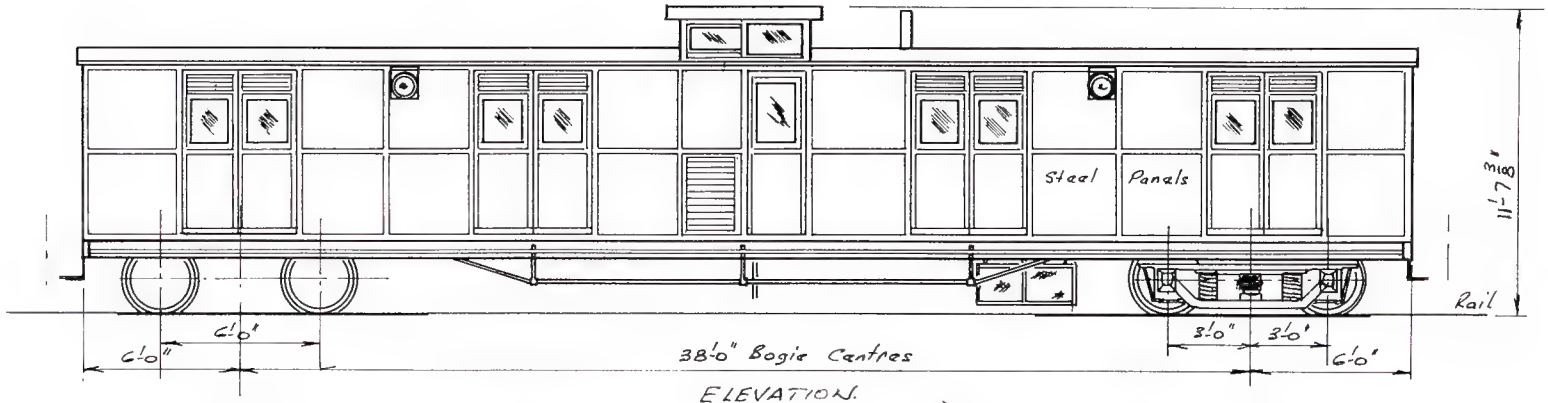
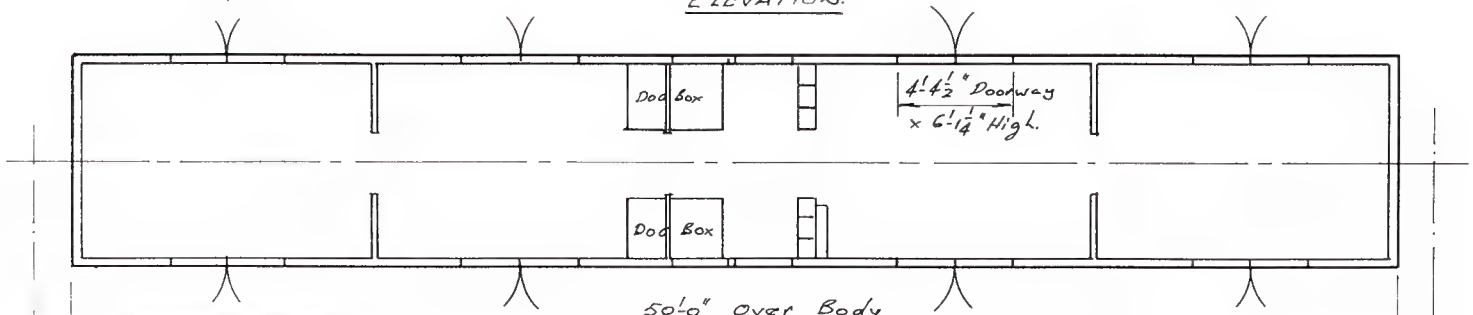
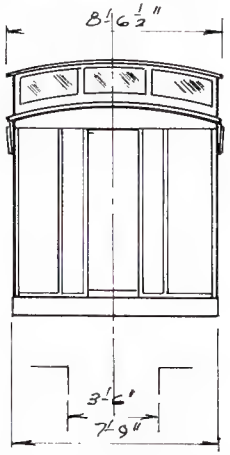


ELEVATION.



FLOOR PLAN



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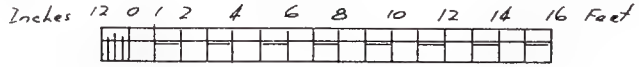

SCALE

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U/FRAME & BOGIES - BLACK
LETTERING - WHITE

NUMBERS:- 171 - 173, 200 - 206

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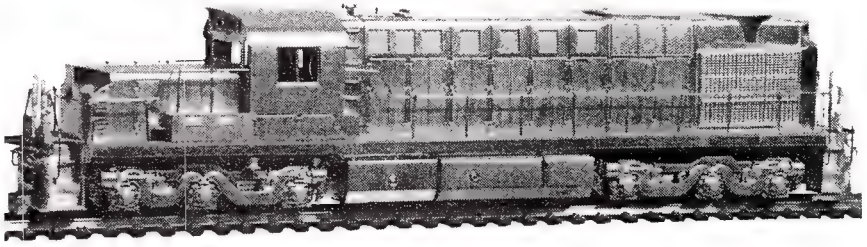
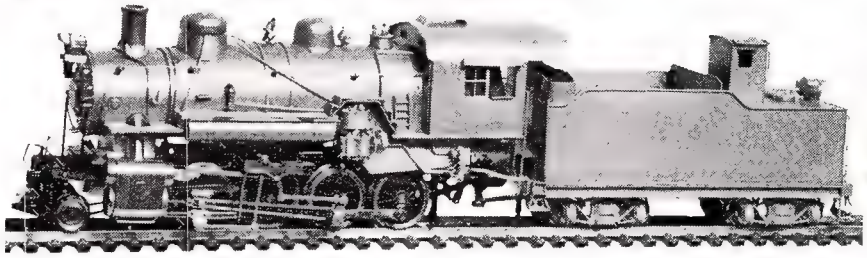
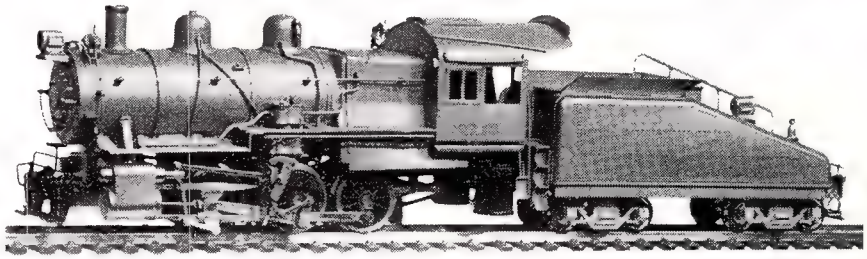
ALCO 'DL600' DIESEL:
Introduced in 1955, this husky C-C Road Switcher is rated at 2400 H.P. The long low hood is a distinctive feature and in producing this fine Loco. to the order of Alco Models, Kumata again offer a Diesel-electric of peerless construction, yet at a price remarkably keen for the quality offered. Length, 9¼ in. Weight, 1lb. 3oz. PRICE **$51.00**



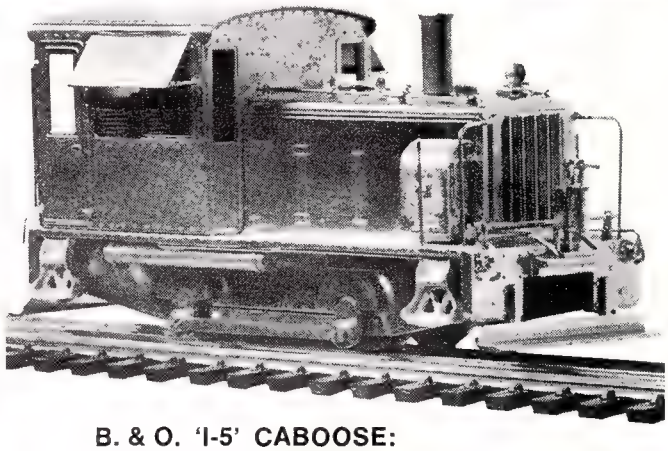
D. & R.G.W. 'C-48' 2-8-0:
Built by Schenectedy between 1906 and 1908, the 1100 series Consolidations of the D. & R.G.W. totalled some 60 Locomotives. With 56in. drivers and 22in. x 28in. cylinders, this model, produced with Kumata's skill, combines quality with sleek grace and the most popular wheel arrangement of all. Pre-blackened frame, pilot and pilot deck. Sprung frame. Honed, lacquered finish. Length, 9½ in. Weight, 1lb. 5oz. PRICE **$67.55**

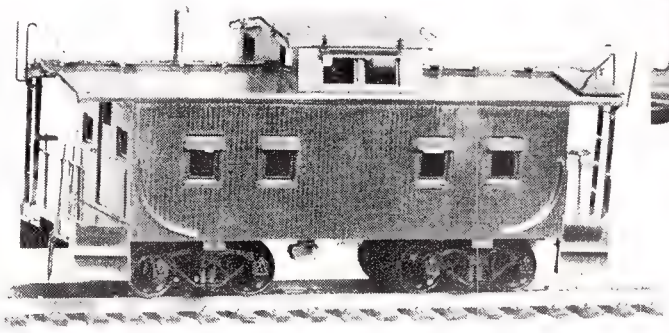


P.R.R. 'B6sb' 0-6-0:
Built to the order of Red Ball, this husky Switcher will be most acceptable to Pennsy. fans. Finely detailed throughout. Equipped with pre-blackened pilot deck and sprung frame. Slope back Tender. Finished with a honed, lacquered finish. Length, 9in. Weight, 1lb. PRICE **$54.36**



D. & R.G.W. HOn3 DIESEL:
A modern Switcher for narrow gauge fans, the prototype of this Rio Grande Diesel offers an interesting subject for the manufacturer's art. Superbly detailed and fitted with outside frames, counter-balances and coupling rods. Drive by worm gear combination, coupled to the motor through single reduction gears, ensuring smooth, low speed running. Polished finish. Length, 2⅞ in. Weight, 5½ oz. PRICE **$30.00**





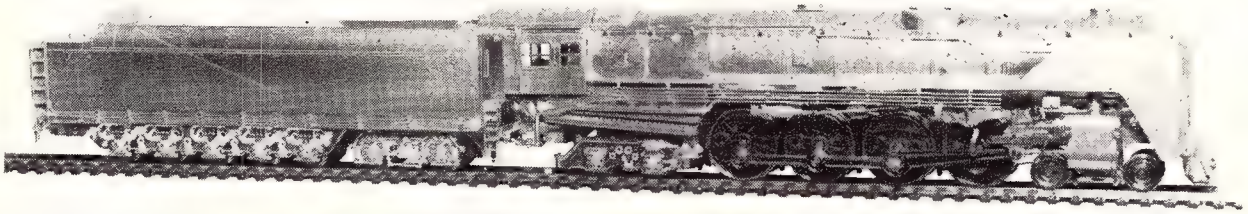
B. & O. 'I-5' CABOOSE:
Taken from the USRA design for a Standard Caboose, this Car can be used for a large number of roads that copied the USRA design. Essential for followers of B. & O. steam, this Caboose is of sturdy etched brass construction, with all external detail built up or embossed. Supplied less trucks. PRICE **$13.55**

SOLE AGENT AND IMPORTER

The MODEL DOCKYARD Pty. Ltd.

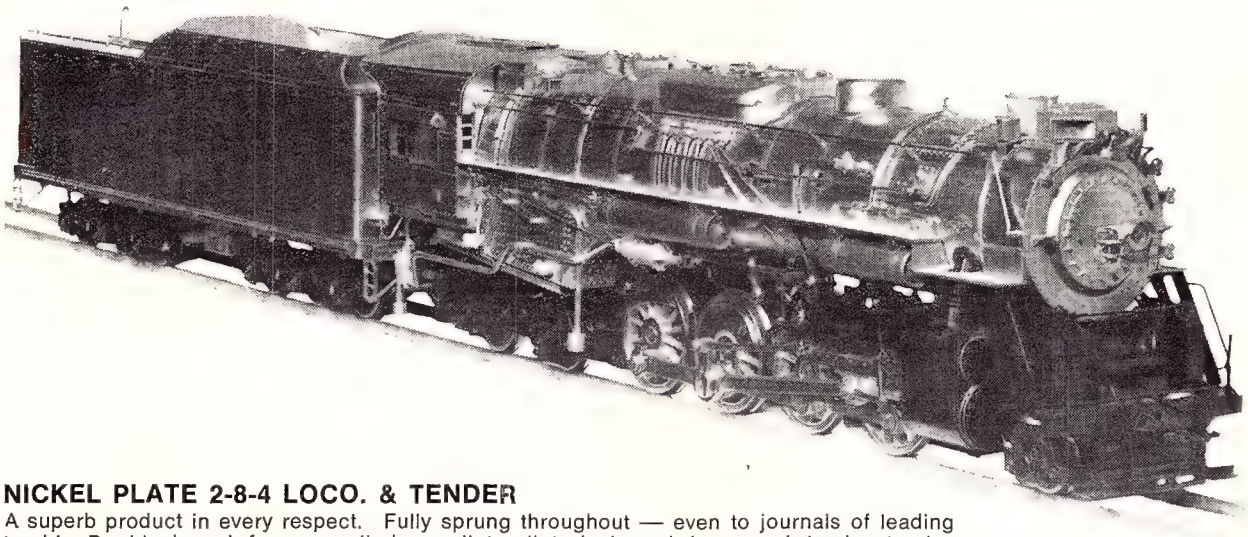
216-218 SWANSTON STREET, MELBOURNE, C.1. ——— 32 3505

NEW — IN O SCALE FROM KATSUMI . . .



N.Y.C. 4-8-4 'NIAGARA' LOCO. & TENDER

Fully detailed externally and fitted with sprung loco. frame, trailing truck, tender pedestals and tender truck. Equipped with detailed back-head and rectifier controlled headlight and back-up lights. Pre-blackened frames, cylinders, trailing truck, pilot, pilot deck, tender running gear, brake shoes and hangers. PRICE ..... **$286.00.** (Also available in HO scale @ $92.00.)



NICKEL PLATE 2-8-4 LOCO. & TENDER

A superb product in every respect. Fully sprung throughout — even to journals of leading truck! Pre-blackened frames, cylinders, pilot, pilot deck and loco. and tender trucks. Detailed back-head and rectifier controlled headlight and back-up lights. PRICE **$275.60**

Other News from "THE DOCKYARD"

In addition to fine scale structural sections in wood, we are now able to offer an extensive range of fine brass sections, in standard 30in. lengths. These comprise of Angles, Tees, Channels, Square Channels, H-Columns, I-Beams, Zees and Slotted Round Bars. For a complete Price List, send large SSAE with your request for a copy . . . Covering large stocks recently indented, a new 4-page Athearn Price List is also available for the price of a large SSAE . . . Tenshodo have followed delivery of the new Santa Fe 'Blue Goose' Hudson Loco. @ $137.70 with a re-run of the G.N. 0-8-0 Switcher @ $84.65. By the time this appears in print our first stocks of the G.N. 'N-3' 2-8-8-0 Loco. will be to hand @ $270.80 . . . A magnificent production indeed, Olympia's C. & O. 4-8-4 'Northern' Greenbriar is now in stock. Painted and lettered, this Locomotive is available @ $132.10. Due soon is the Reading 0-4-0 Camel-back & Tender @ $47.65 . . . Following supply of the 3-Truck Willamette Geared Locomotive @ $86.70, advance information from Northwest Short Line would suggest that their next model coming will be the Kosmos Timber Co. No. 11 2-6-6-2 Logging Loco . . . In N scale, Sekisui have followed supply of the 85ft. Coach and Vista Dome Cars with the Observation and Baggage Cars. Heralds are: S.F., S.P. 'Daylight', G.N. and P.R.R. All @ $3.30 each. About the time this appears on the bookstands, we expect to have the re-run of the Alco PA-1 'A' Unit Diese! @ $16.25. Heralds will be: G.N., S.P. 'Daylight', S.F., P.R.R., U.P. and Penn Central. With these stocks we hope to have more Gondolas and Steel Reefers . . . In the same gauge, from the U.K., Peco have delivered their Low Sided Wagon, Pallet Van, Open Wagon and Fish Van . . . In HOn2½, Peco have delivered the following new lines for 30in. gaugers: Wagon Turntable @ 45c, Couplers (Egger-Bahn type) @ 40c, Dummy Point Lever @ 45c and Buffer Stop @ 35c . . . Those following British prototype and working in OO will be interested to learn that the following white metal kits will be in stock by the time this Magazine is in print: GEM LBSC Stroudley 0-4-2 "Gladstone" (including number plate set), LNWR 2-4-0 "Precedent" and GWR 14XX 0-4-2T. K's LSW Adams 4-4-2T, Dean "Goods" 0-6-0, LBSC "Terrier" 0-6-0T, LMS Stanier 4-6-0 "Black 5", LNER (R.O.D.) 2-8-0, 40ft. GWR Parcels Van, 57ft. 'B Set' Coach and Webb Coal 0-6-2T . . . 'HELJAN' HO & N scale plastic structure kits are now available in Australia! See your nearest retailer handling our Sekisui and other lines. Prices are extremely reasonable, yet the quality is superb . . . In the Balboa line of HO scale locomotives, the Santa Fe 4-6-2 '3400' Series Pacific is now available @ $92.85. Also the S.P. 2-8-8-4 'AC-9' Locomotive @ $173.15 . . . For those who missed out on the first run of Balboa's Alco-G.E. 'PA' Series A and B Units, the factory intend continuing production over the next six months. Heralds will be progressively expanded to include: S.P. 'Daylight', Santa Fe, U.P., N.Y.C., P.R.R., D. & R.G.W., Missouri Pacific, G.N. and S.P. Gray . . . . New from Kumata's shop and now available is the S.F. Old Time 'Blind End' Caboose Body @ $13.90, the P.E. 456 "Mt. Lowe" type Interurban Car @ $34.70 and the famous P.E. 1544 "Electra" Steeple Cab Locomotive @ $36.45 . . . O gauge stocks continue to expand: 'King Models' USRA 0-6-0 Switcher is expected soon. Meantime, Katsumi have supplied the C. & O. 2-6-6-6 'Allegheny' @ $402.00 and the C. & O. 2-8-4 Berkshire @ $275.60.

SYDNEY MODEL RAILWAY CONFERENCE

SMRC 1969

The Australasian Model Railroad Magazine and the Model Railway Clubs of N.S.W. invite all railway modellers to a Model Railway Conference in Sydney during Easter 1969.

The programme will include:—

Competitions
Modelling Demonstrations
Club Visits
Rail Tour
Dinner
Trade Displays
and
Special Features for the Ladies

COST: $12 per person for Adults
$10 for full time Students

Hotel accommodation available at extra cost, and must be booked by December 15.

For further details please send SAE to:—

Model Railway Conference Bookings,
P.O. Box 107,
LAKEMBA, N.S.W. 2195.

When writing please indicate your accommodation requirements if any.

The Australasian **MODEL RAILROAD** Magazine September/October, 1968 Volume 3 Number 34

The Official Journal of SCMRA in Australasia; incorporating the YARDMASTER, The Bulletin of the Sydney Model Railway Society

ARTICLES

10 **PACIFIC MAPLE MODELS, by Graham Maynard.**
A unique method of rolling stock construction.

12 **KOONDROOK ON THE MURRAY.**
A prototype yard for a corner.

14 **PLANNING IN N SCALE, by Paul Van Leuven.**
Baseboard construction of interest to all modellers.

16 **TROUBLE AT THE TIDEWATER TERMINAL, by Charles Huggard.**
A prototype problem in model form.

18 **BUILD YOURSELF A MODEL "T", by Russ Siddall.**
Part 2 of the construction of a Victorian Railways diesel.

21 **THE DIESEL LOCOMOTIVE, by "Loco".**
Another article on how diesels work.

22 **S.A.R. COMPOSITE GOODS VAN, by Chas. Huggard.**
A reader builds our plan.

REGULAR FEATURES

6 Editorial.

6 Mixed Gauge.

6 On the Cover.

7 Armchair Review.

9 Shop Detective.

24 Mail Bag.

25 Club Car.

25 Yardmaster.

26 Market Place.

27 Our Plan.

EDITOR J. T. St. Leger Moss
ART DEPARTMENT Howard G. Armstrong, Norman Coughlan, Ivan W. Ive
PRODUCTION DEPARTMENT Peter R. Woolley
COPY DEPARTMENT Fay M. Brown
CIRCULATION & SUBSCRIPTION Terence N. Carpenter
CORRESPONDENCE P.O. Box 204, Kings Cross, N.S.W. 2011

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Editorial

Barely a week goes by without someone asking us at the magazine "What is the best layout I should build?" Invariably this question is asked by someone new to the hobby of model railways.

Generally the reply is we don't know. It is difficult to explain to newcomers that it is quite normal to pull down what appears to be a perfectly good layout and start again on a new one, sometimes even before the old one is completed. I doubt if there is such a thing as a perfect layout; if there was we would all have it and what then would be the interest in seeing other peoples' layouts? Quite possibly it is this search to improve that is the driving force which makes model railways a continually growing hobby.

Model cars which were so popular a few years ago were inclined to have their road/race tracks set out as models of famous racing circuits in various parts of the world. This is following a strict prototype, something which railway modellers cannot do, although we do follow prototype practice to some extent. Most railways lay their first tracks as quickly and cheaply as possible. After a time the railway finds that better grades and wider curves will improve operation; so the tracks are relocated. This is what we do as modellers when we rebuild a layout. Of course we can do something that prototype railways cannot: that is we can change the scenery our railway runs through, and in doing so we attempt to produce a better model of a railway.

Here at the magazine we feel that a time has come for improvement. This issue you will see our most noticeable change — a new cover. We intend to gradually change other parts of the publication so it will eventually be completely restyled.

We noticed when planning our cover the changes which are appearing in the model railway field. There is a rethinking in the hobby and a return to modelling the railways of the present, rather than the past. This trend is world-wide; the only reason for this rather welcome change which we can find is the coming of N Scale, which because of its size, has made available to modellers a large number of diesel locomotives and their associated modern rolling stock.

In Australia a trend to modelling Australian railways is becoming more noticeable. There are now at least three manufacturers who are developing interesting ranges of rolling stock; even an Australian produced locomotive is now available.

Yes, the reason for the continuing popularity of model railways is its continuing change.

ON THE COVER:

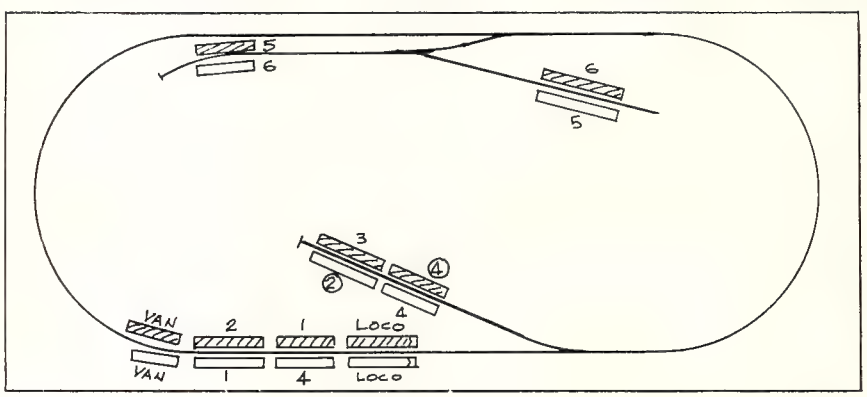
Modelled in cardboard, balsa and wire found in the scrap box. At least that is what we are told by J. Burgess who built the Commonwealth Railways GG class 85' car transporter. Photo also by J. Burgess.

Shunting Problem

Once again we give you a shunting problem you can do while waiting for the paint to dry.

This problem is similar to the one used at the S.C.M.R.A. convention last Easter.

The vehicles shown in black are to be shunted to the positions shown in outline.



MIXED GAUGE

By Spencer Street

The old problem of two scales for one gauge has come up again, this time in N gauge. A British manufacture is producing models of British rolling stock to a scale of 2mm=1 foot rather than the normal 1.9mm=the foot. This of course means that the British equipment is oversize. Now I know there were some quite valid reasons for the 4mm, 3.5mm problems in HO, but I find the reason advanced by this manufacturer rather odd. He claims this oversize makes the equipment look better when operated with the larger sized equipment of other railways. This may be true, but then British equipment is smaller than that of most other railways, and surely it should be modelled as such. After all could we justify any model of the NZR being the same size as a model of the new West Australian Railways standard gauge equipment?

★ ★ ★

Recently we have heard of actions by rail-fans which have been so upsetting to railway employees that industrial action has been threatened. So may we remind all rail-fans to obtain permission before going onto railway property and after having done this, go about their inspection with as little inconvenience as possible to the railway's employees.

★ ★ ★

Do modellers in Australia realise the modelling potential of Australian Railways? Apart from the three major gauges, there are also the narrow gauge cane railways in Queensland, and the new heavy gauge lines in the North West. There is high density suburban operation, some electrified mainlines, steeply graded mountain lines and open plain operation. There is variety in scenery, from beach fronts to the Nullarbor Plain (and it takes as much skill to model either).

Previously a modeller of Australian prototype had to pick a system and model it exclusively. If there was a piece of rolling stock of another system which he liked, it was too bad. He could build it, but he couldn't run it on his layout. Now all this has changed. Every system on the Australian mainland has standard gauge trackage, and the freight equipment of all systems are interchanged with almost as much freedom as in Europe or North America. With the development of Bogie Exchange techniques, gauge is no longer a restriction for modellers.

★ ★ ★

Bogie Exchange has highlighted to the Railway Department in Australia the need for standardised vehicles for interstate traffic. In view of this it has now been decided that all future designs of new rolling stock will be to a common design.

In practice this is achieved by one system being made responsible for each new design of vehicle.

To us as modellers this means we can expect, that in time, we will reach a situation similar to that overseas, where model manufacturers are able to produce a range of identical wagons painted for various systems.

★ ★ ★

Most modellers, when they name stations on their layouts chose names which have likely sounding names, without them being identified with any particular place. I recently came across a town with a highly improbable name, but one which would be apt for many layouts. This town, or at least location name is for a port being developed on Shark Bay, West Australia. At the moment there is no railway there, but it has a real railway sounding name — Useless Loop.

ARMCHAIR REVIEW

MARKLIN-HAMO Series 38 4-6-0 locomotive. Supplied by J. Searle & Sons, 315 Pitt St., Sydney.

The locomotive under review is a model of the German Federal Railways (DB) series 38 mixed traffic 4-6-0. The prototypes were built for the Prussian Railways as class P.8 in 1906. Approximately 4,000 locomotives were built and came to operate on the Austrian, Belgian, Czechoslovakian and East German Railways as well as the DB.

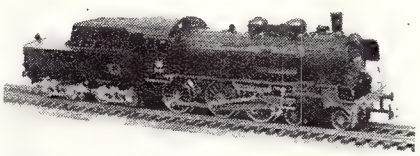
The model differs for most Marklin locomotives in that it operates on two rail and 12V D.C. Marklin started to release 12V D.C. two-rail versions of their locomotives about two years ago under the Hamo name.

The locomotive's superstructure consists of a well detailed diecasting. The running gear has a metal frame and wheels with axle insulation, and a nicely constructed valve gear set. The model is powered by a permanent magnet motor mounted over the leading driving axle with a spur gear drive to all wheels. Examination of the wheels shows them to be deep flanged and slightly under gauge when measured with a N.M.R.A. gauge. When tested the locomotive ran satisfactorily on Peco track but sometimes stalled on Shinohara turnouts when the flanges lifted the wheels from the rail. Turning down the flanges would remove this problem. The tender is a plastic casting and acts as current return for the locomotive.

I tested the locomotive on a layout running both light and with a train. The maximum speed was 72 m.p.h. at 11V. Minimum speed was 20 m.p.h. at 3V. The locomotive was tested with a train of six converted Marklin coaches and easily negociated the layout at speed. Typical current draw was 0.4A at 11V.

Similarities of driving wheel size and spacing between this model and the N.S.W.R. C.36 would be a start for a 36 model. Both locomotives have 5 ft. 9 in. driving wheels, the total wheel base of the series 38 locomotive being only 2 ft. 6 in. longer than the 36. A person constructing a 36 would have to build a new boiler and tender.

In summary, this is a well made model in the long Marklin tradition, and is value-for-money at $24.50.



N.S W R., MLE Class Flat Car. Manufacturer: MRC Models. Available from Bergs Hobbies, Parramatta; Hobbyco, Sydney. Price $1.65.

This kit is the second from this manufacturer and like the first, an MRC class van, is of wood and is supplied without bogies or couplers.

On the N.S.W.R., the MLE has been modified into many other similar vehicles, most notably the FME, UME and SME. In fact, all told, there are some 16 variations of this original class. So this is a most useful kit for modellers to have available.

The parts of the kit are supplied precut for an MLE, but obviously if one of the variant codes is being built, some cutting will be necessary. The wood is shaped and milled, and when constructed the model scales 6 inches short. The extended piece of the underframe Part No. 9 had to be shortened to fit the X2f type coupler. It is possible that this would also be necessary for fitting some of the Kadee types but not for the European NEM standard or Tri-ang couplers.

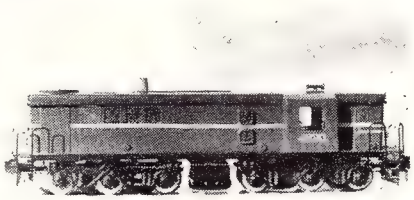
The instruction sheet is much clearer in this kit than for the previous one, and information on bogie placement, painting and lettering, although the shaped longitudinal deck sides parts 17 and 18 are shown as parts for the MLE they are, in fact, fitted only to the FME.

The types of bogie fitted to this car are commercially available, manufactured by either Athern or Central Valley under the type name of Symington or Andrews. Both types are similar, if not identical to types used under these wagons.

O GAUGE 48 CLASS DIESEL. Supplied by E. K. McIntosh, 74 Broadarrow Rd., Narwee, N.S.W. 2209. Price $64.00.

We are always intrigued by the advertisements that appear in our Market Place columns and accordingly asked this advertiser for a locomotive for review.

Handling an O gauge item, especially a locomotive, is one of the very satisfying things in this modelling business. Firstly, it is so heavy; beautifully heavy, in fact. One feels one is holding power in one's hands. With this model we were indeed. With its weight this locomotive has wonderful pulling power, and representing as it does one of the commonest work horses of the N.S.W.R. it should be a very popular model for those who run this scale.



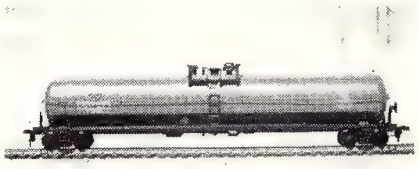
We are sorry we did not have a long length of track and some cars to pull around our garden. There's something about O gauge!

We feel that the detail on the model is fairly good. The handrails are a little too thick but as these locos are often subject to rough handling in garden layouts this is a good thing. The paint is excellent and the colour match to the prototype is so good that one might suspect that the Department of Railways had done the job. The number lettering and the lining is good. The screening material would be criticised by the purist as being too coarse. Glass or perspex windows on the cab would have improved the model's appearance. Many HO locomotives cost more than this model.

62' TANK CAR KIT by Athearn. $4.55. Supplied by Sydney Model Railroad Supplies, 4 Rees Ave., Belmore, N.S.W. 2192.

This is one of the nicest freight car kits that we have seen for a long time. It is moulded in a very good plastic with excellent reproduction of rivets and other detail. Assembly is very easy. It can almost be classed as a "shake the box" production but there are several things that the modeller should take care with. One of these is the assembly of the hand rails. These are made of a fine, quite to scale springy wire which is liable to snap if not handled carefully. Flash is negligible.

The bogies are fitted with the now famous free-running RP-25 wheels in plastic and are accurately fitted to the axles with no wobble. The bogies are Symington type. X2F plastic couplers are included but the draft gearbox is suitable for fitting Kadees or any other type you prefer.

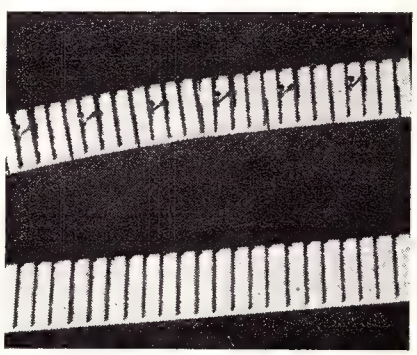


Our sample was an indian red in colour—Chicago and Great Western colours. Other lines available are American Chemical & Plastics in silver; Burlington, Shippers' Car Line and Union Pacific in black; and General Dynamics Corporation in grey. The cars are labelled to carry 14,000 U.S. gallons.

Although as long or longer than some passenger cars, these tankers would grace any modeller's layout except those with very small radius curves.

GAUGE—RIGHT TRACKBASE Supplied by Titchers Hobbies, 309 Lonsdale Street, Dandenong, Vic., 3175. Prices: Straight 25 cents, curvable 30 cents, per 18" length.

It is always a pleasure to review a product wholly produced in this country. This trackbase is ingeniously produced from three ply and comes in straight and curved forms. The first samples submitted were in HO scale and included a fully detailed length of track fully ballasted. Its appearance and gauge were excellent. The product under review is the N scale version. The sleeper spacing appears to be just right. There are two accurately spaced notches in each "sleeper" set for 9mm. gauge. The producer advises glueing the N scale rail to the sleepers with pliobond which he states makes a virtually immovable joint.

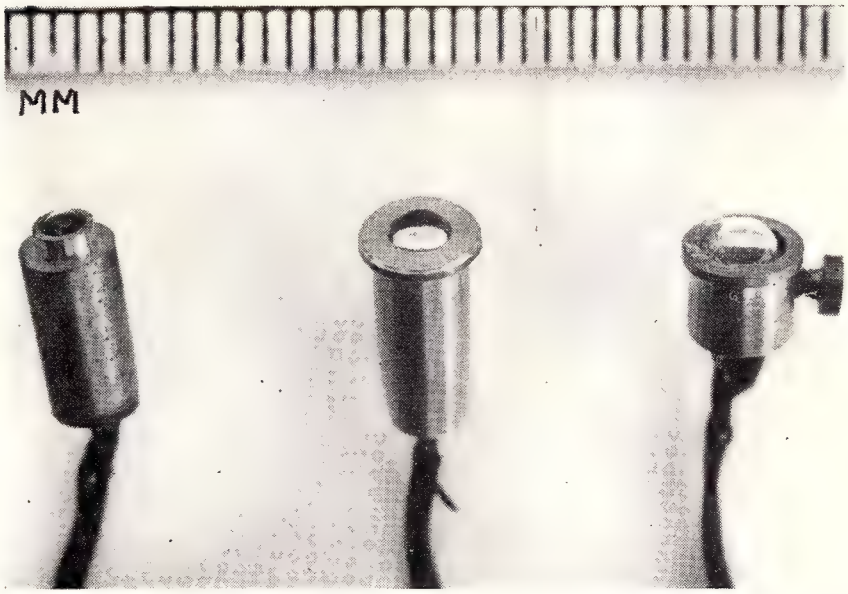


We were told that the curved section, which you can see has saw cuts let into one side, would curve to 18" radius.

However, we found that the grain of the wood broke when we tried to reach this curvature. We feel that wider cuts would obviate this trouble. However, careful slow curving might help to prevent the breakage.

The track bed should be glued to the layout and nails used only as a temporary fixing device until the glue sets.

The product is keenly priced and should make track laying fast and accurate for the N scale modeller.



LIGHTS FOR LOCOMOTIVES.

Supplied by The Model Dockyard, 216-218 Swanston St., Melbourne. 3000. Price: 20 cents each.

Most hobby shops stock grain-of-wheat bulbs which we all at some time or other have contrived to use on our locomotives to represent head and tail lights. Now the Dockyard has three new well produced items of interest to the modeller.

Our photograph with the included scale will show the details of these three lights better than we can describe them here. The headlight with set screw, which is shown on the right, comes in white only. The other headlight in the centre and the tail-light on the left are available in clear, red, green and amber, which will surely make them useful for a wide variety of uses besides in rolling stock.

The only fault we could find is the usual one that is so common with all minature lamps supplied for railway modellers—they are too bright when a full voltage of 12 volts is applied. Why can't model lamps be made for 16 to 20 volts so that they will glow more realistically on the layout? We advise readers who use these to incorporate a resistance in series to obtain this effect and, incidentally, to prolong the life of the lamps. The price is excellent.

Contributions to this column are welcomed

N SCALE OBSERVATION AND BAGGAGE CARS.

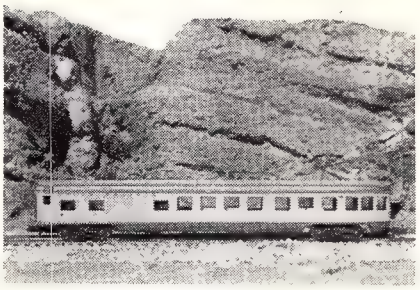
Supplied by The Model Dockyard, 216-218 Swanston St., Melbourne. 3000. Price $3.30 each.

Having begun modelling when O gauge was king and HO the up-and-coming youngster, we find it difficult to believe the wonderful detail that is now available in the N scale products now being offered to the modeller.

These two cars, so reasonably priced, match up, of course, with the vistadome and coach cars recently made available by this firm. Heralds available are: S.P. Daylight; S.F., G.N. and Pennsy.

Those readers who are able to see these cars at their hobby shop will be amazed at the detail that is revealed in looking through the windows into the interior. The cars roll exceedingly well, which has always been a feature of Sekisui products.

We photographed these cars with some background scenery which we have been using lately in our photo department so that readers can visualise how they will look on a layout.



We are only sorry there were no other cars and a locomotive to show the appearance of a train in this minature scale. This reviewer only regrets that he is so deeply involved in HO. Perhaps a coffee table in the future?

When writing to advertisers say you saw it in A.M.R.M.

PIPING LIGHT AROUND CORNERS.

Visiting a friend recently, I was shown a large coil of black plastic- covered crystal clear material resembling fine lucite rods. This material has the property of light transmission along its entire length. This means that if a light source is applied at one end, it will be observed to appear at the other end with only slightly diminished intensity. This phenomenon occurs even if the material is tied in knots or over indefinite lengths.

Many industrial uses are apparent, but it took me only a few seconds to realise that its uses for the railroad modeller would only be limited by his scope of ideas.

I have found it almost impossible to obtain bulbs small enough to be used as marker or running lights on locos or rear end cars, brake vans, etc. All we need now is one 12-volt "Grain o' wheat" bulb fitted in a suitable position inside the loco or van. The flexible "light pipes" are simply fitted with one end adjacent to the light and led up to appropriate outlets at either end of the vehicle.

Red or green lights are simply obtained by placing a dab of colour on the ends of the pipes.

Rear end running lights on passenger carriages are arranged in the same way by simply drilling small holes in the correct locations and cementing the pipes in position. The outside diameter of the material is approximately 2 millimetres, but special trimming reveals a bundle of about six fine plastic rods.

Uses of all sorts of signal or indicator lights should be easy to devise. No doubt many enthusiasts could dream up ideas for this remarkable material, which it is claimed never wears out and can even be bent at right angles and still transmit light.

I have secured a short length for experimental purposes, and I think that the cost is about 25 cents a foot.

If any reader is interested, supplies appear to be only available from Mr. H. Collins, 29 Daffodil Drive, Woy Woy, N.S.W. 2256. Phone (043) 41-1734. Mr. Collins advised me that he would be pleased to forward supplies to us, as modellers, at the above reduced cost.

I feel certain that he would be pleased to answer any enquiries regarding this material, or to forward it on receipt of costs to cover postage, etc. Stamped and addressed envelopes for replies I am sure would be appreciated.

—CEC. PALMER

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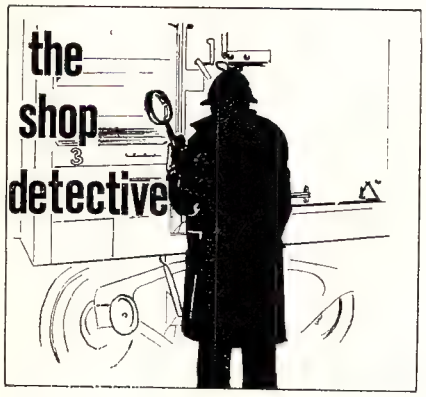

In Sydney Hobbyco at the moment have a range of N gauge rolling stock that looks like all the manufacturers' catalogues in 3 dimensions. I am told that even more equipment is on the way. Lineside structures are also available and they have the Pola N gauge catalogue available for 55c.

The same shop also has a good supply of bits and pieces for modellers, such as a small tool kit comprising hammer, adjustable spanner, a Phillips and a plain screw-driver. Also a most useful spray gun operated by a pressure can for $4.75. New pressure cartridges are $2.95 and extra jars of graduated pyrex are 60c.

Searle's as usual have a good range of Marklin, and the two rail version Hamo locomotives and rolling-stock. When in the shop ask for what you want. Searle's range of unusual items is really extensive.

For those people who work in the northern end of the city of Sydney don't forget the Fantastic Hobby Shop in Angel Place where their supply of model railway equipment is increasing all the time.

Following up a clue revealed in a "Letter to the Editor", in the last issue of this mag., I asked the Melb. Sports Depot people if they intended to import any "0" gauge Heinzl equipment. I was told that the future of this line was in some doubt, as M S D had just received a letter to the effect that the principal of that firm, Hans Heinzl, had recently died. Could be that the models from this maker will soon become collectors' items.

If you have been considering a rail bus for your staff, M S D have a neat little job by Eheim in HO either 2 or 3 rail, N E M flanges only. Also available is the full range of Peco Wonderful wagons.

Looking through the plastic construction kits I was very impressed with the rundown type branchline engine house by Quick. The road overpass kit would be suitable for the smaller layout, whilst the Esso complex would be a proposition where space is not at a premium. These latter two kits by Kibri. These kits could be easily "sceniced" into place with the Triang coloring material, and then brought to life with Triang people from the MSD range.

As usual I spent a most pleasant hour at the Model Dockyard. Tucked away in the corner of one of the showcases I spotted a new (to me) type of vice. On request, one of the very obliging young salesmen unpacked and demonstrated this remarkable little precision instrument for me. Built of cast aluminium and plated steel, its spring assisted jaws, which swivel through 360 degrees, are mounted on an adjustable cantilever arm. It can be used free standing on its rubber soled base, or can screwed to your bench. There are several other attractive features about this top quality instrument. Ask for a demo. next time you are in.

As reported in this column last issue, most of the milled brass shapes are available at the Dockyard. A price list can be had for the asking, or enclose a stamped self-addressed envelope with your mail request for it.

Amongst the wide variety of lamps you have missed the Kyodo blinking lamp. This is ideal for lighting up your shop and factory signs, or to illuminate your wayside billboards. One such billboard, advertising Tyco Industries, is to be had at Dockyard, but you could easily glue in your own advert.

For the scratchbuilder of real estate, I understand a new type of brick siding is available. From its description it could be plastic. I haven't seen it, but ask around. Could be just what we need.

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Maybe he could be looking at our range of "N" scale and thinking should he switch.

Most probably though, he spends the time talking with other modellers. Our customers are a friendly and talkative group. Like all modellers they are happy to tell others of their successes and to hear new ideas. Our staff are modellers, but sometimes our customers can help them too.

Why don't you call in and meet our customers?

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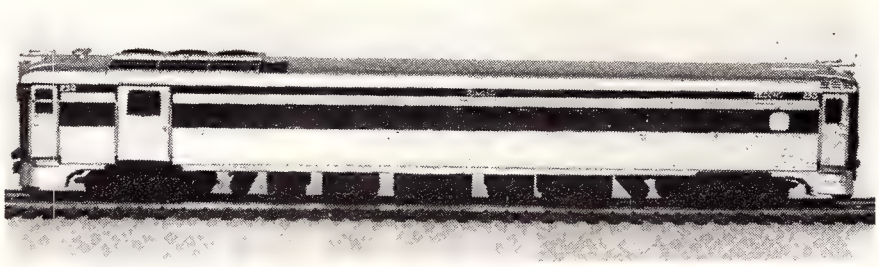
PACIFIC MAPLE MODELS

As told by **Graham Maynard** to a Staff writer



A Blue Bird rail car of the SAR, built by the method described in this article.

Due to the lack of models of Australian prototype rolling stock, those modellers who desire to follow the local systems have had to spend considerable time and effort in scratch-building. Many various methods have been tried, with varying degrees of success. Detailed here is one method which has been successful as the accompanying photographs show. This article deals with the manufacture of one carriage—however, any number of vehicles of the same type could be mass produced, thus giving a uniform appearance for a complete train. As time and space permit, other articles describing construction of bogies, couplings and pantographs will follow.

Planning and Preparation

Having selected the particular vehicle to be modelled, outline diagrams can be obtained from the appropriate authorities, along with a selection of suitable photographs. You may, however, wish to take your own photos showing some particular part in greater detail.

With any plan it is advisable to check that all the dimensions that you may require are shown; it may be necessary in some instances to calculate the unlisted dimensions. This operation should be checked thoroughly before commencing work.

Tools Required

Scale rule, marking gauge, hand saw, steel plane (short), try-square, vice, chisels and mallet, scriber, razor blade, glass paper, carpenter's pencil, rasp, files (flat and half round) and piece of perspex for template.

Material

Selected Pacific Maple, 1¾ in. x 1¾ in. D.A.R. Length to be determined by the number of vehicles to be produced.

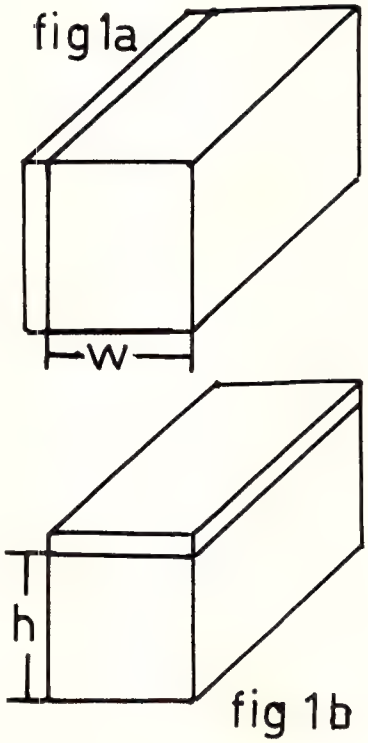
Warning

Do not expect perfect results with the first few models, but if you can use a few simple carpentry tools correctly, a number of good quality models will soon be rolling around your layout. A few points to watch when working with timber could be repeated here, and if followed should ensure good workmanship and minimise the frustrations that can be caused by inexperience.

1. Timber selected must be free from knots, and should have a straight even grain.
2. When using glass paper, place it flat on the workbench and move the job back and forth across the paper.
3. When recessing the windows and doors, use the chisel in the same direction as the grain, i.e., so that the chisel does not 'dig in'. However, when cleaning out the edges, it may be necessary to go against the grain . . . be careful!
4. If you have the misfortune to chip the timber, glue the chip back in place and, after allowing sufficient time to set, carefully trim up the edges with a razor blade.

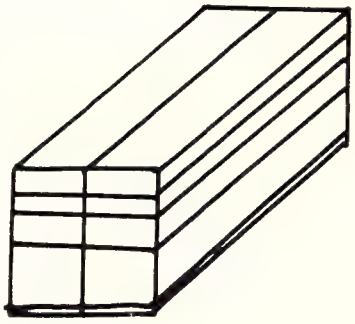
Preparing the Block

1. Cut timber to required length plus 1/16 in. to allow for finishing.
2. Using a marking gauge, scribe the carriage width around the block. (Fig. 1a.)
3. Depending on the amount of waste material, saw and plane to size. (A short steel plane is best.)
4. Scribe the overall height of the carriage, i.e., from the underframe to the top of the roof. (Fig. 1b.)



5. Saw and plane to size—you may find that the off-cut from this could be used for flatcars, compressors, etc.
6. Smooth all surfaces using glass paper on a flat surface . . . be careful not to remove too much of the block!
7. Using a sharp pencil, lightly mark horizontal lines for windows, roof lines, etc., and also centre line of roof and ends. (Fig. 2.)

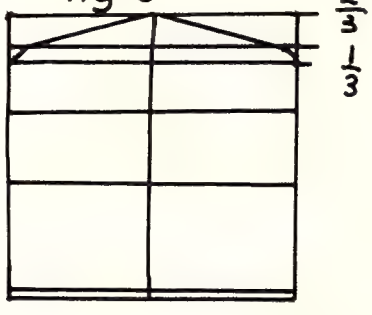
fig 2



Shaping the Roof

1. Mark curvature of the roof line on ends of the block—this will vary with each type of vehicle. (Fig. 3.)

fig 3



2. Carefully shape the roof with a plane in the order shown in Fig. 4, check the ends of the block regularly to ensure uniformity. **Do not** plane down to the line on the ends of the block.

Note: Before finishing off the roof with glass paper, it would be advisable to make a template of the desired shape. Perspex would be a suitable material as it can be marked quite easily, and the waste removed with a half round file.

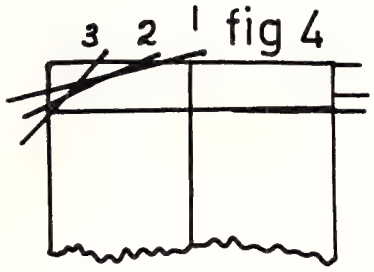


fig 4

3. Finish the roof with coarse and then fine glass paper flat on the bench, checking regularly with the template. **Do not** roll the block on the glass paper as this could result in an uneven shape.

4. Using a sharp pencil, go over the roof centre line. (This will be used later when fitting vents, etc.)

5. If the carriage has sloping sides and/or ends, or rounded corners, mark out and remove waste with a rasp, be careful not to break any chips off the end of the block, and finish off with glass paper.

The block should now resemble the vehicle being modelled.

Marking and Cutting Windows and Doors

1. Using a try-square, scale rule and pencil, mark off vertical lines as required for doors and windows. (Fig. 5.)

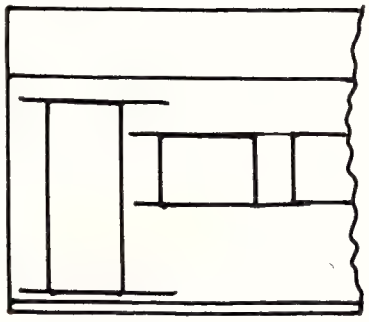


fig 5

2. With a razor blade or some other similar tool and a try-square, cut the vertical lines as required for doors and windows to 1/32 in. . . . be careful with rounded corners in some windows.

3. With a marking gauge adjusted for the horizontal lines of windows and doors, mark lines 1/32 in. deep. (Don't forget the rounded corners.)—Fig. 6.

fig 6

4. Carefully cut the rounded corners with a razor blade.

5. As some doors and windows are flush with the sides of the car, use a scriber to make the razor cuts deeper, as these lines will be needed during the painting of the finished model. (Fig. 7.)

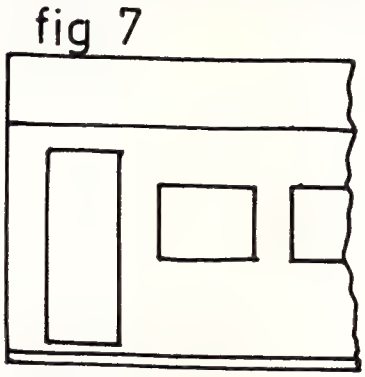


fig 7

6. For recessed windows and doors, use a suitable chisel to remove waste material to a depth of 1/32 in. Check the direction of the grain before removing waste so that you do not 'dig in'. (Fig. 8.)

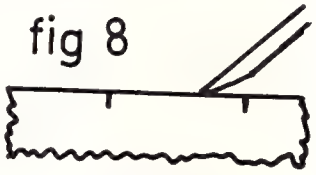


fig 8

Underframe

Remove waste material with chisel, finish off with a file if possible as this will give best results. Some fittings such as compressors, etc., will have to be made separately and glued on later.

Fluting

1. If the car has fluted sides, mark the position of the flutes with a sharp pencil and cut the flutes with a scriber and straight edge. (Fig. 9.)

2. Go over the scribed lines with a marking gauge, being careful not to go into the door. (Fig. 10.)

3. If the roof has fluting, then do this in a similar manner to the sides. (Fig. 11.)

Carriage Ends

Using a pencil and then scriber, mark out the end of the block and remove waste material. A fine chisel may be required for this operation.

Undercoating

Depending on the finished colour, give the block two coats of undercoat, sanding between each coat, and cleaning windows, doors, flutes, etc. Painting and fixture of handrails, etc., will be discussed in the next issue.

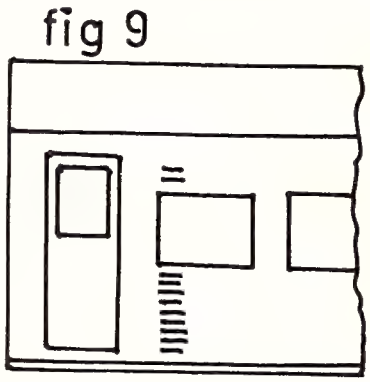


fig 9

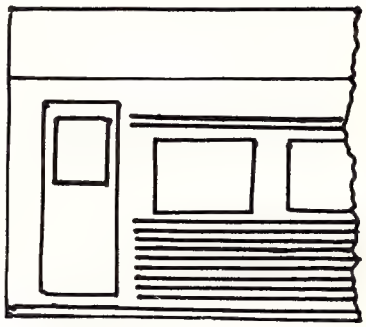


fig 10

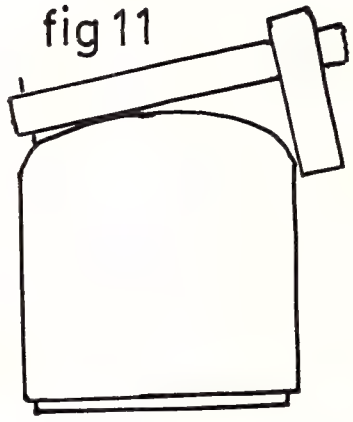
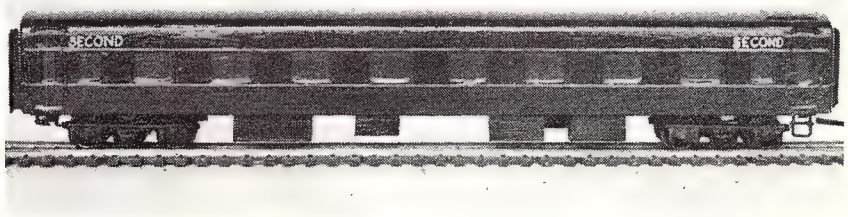
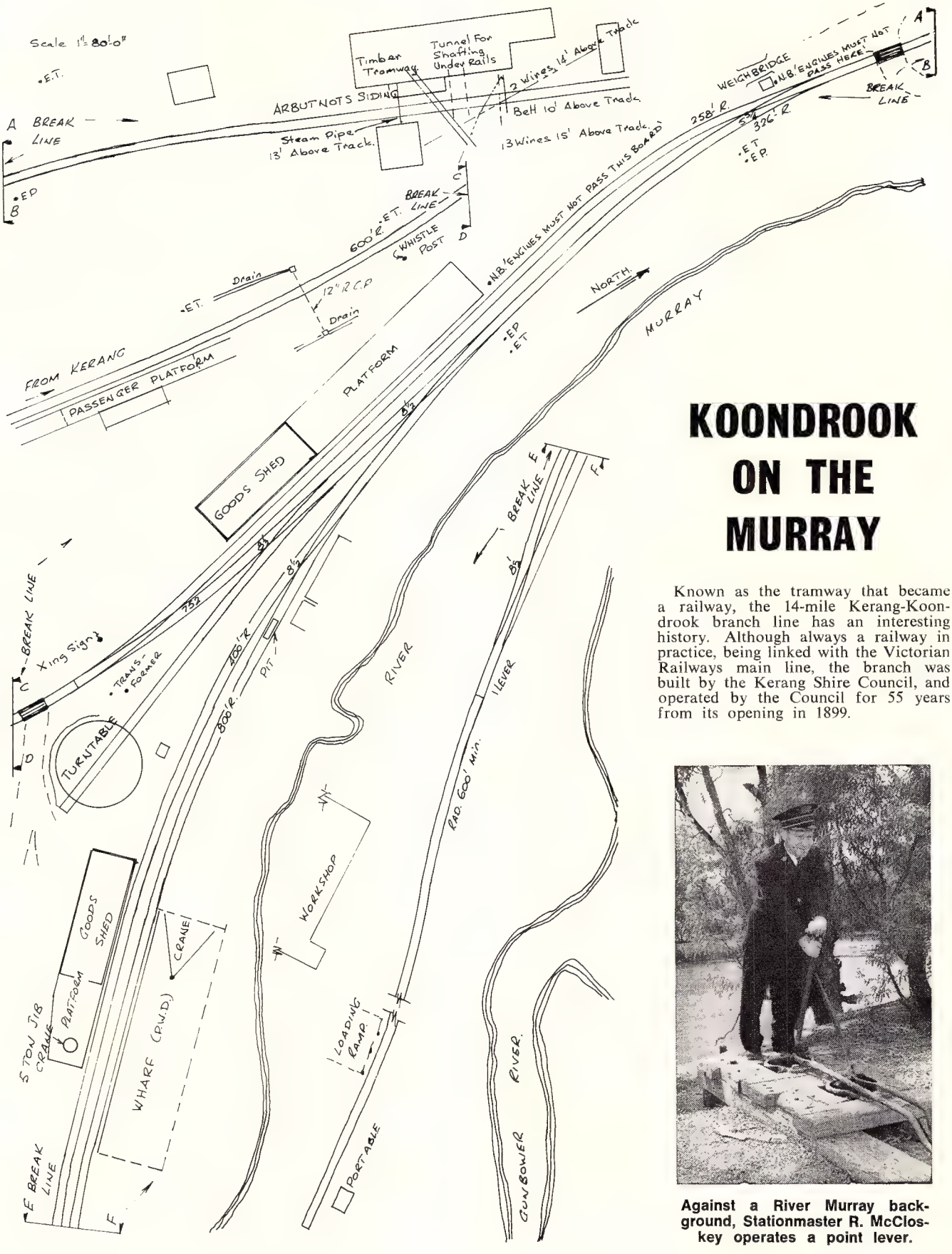


fig 11





KOONDROOK ON THE MURRAY

Known as the tramway that became a railway, the 14-mile Kerang-Koondrook branch line has an interesting history. Although always a railway in practice, being linked with the Victorian Railways main line, the branch was built by the Kerang Shire Council, and operated by the Council for 55 years from its opening in 1899.

Against a River Murray background, Stationmaster R. McCloskey operates a point lever.

Koondrook's rail line and passenger platform are in the middle of the main street. In the background can be seen the goods sheds and sidings.

Local Government legislation permitted municipalities to build and operate tramways for public transport. Consequently, when the Kerang (then Swan Hill) Shire wanted a transport link between Kerang and the then thriving River Murray port at Koondrook, the Kerang-Koondrook tramway was born.

The branch line was taken over by the Victorian Railways in 1952.

The volume of sleeper tonnage from Koondrook is indicated by the long rake of wagons; they are mechanically loaded.

Skirting the banks of the River Murray, Koondrook's goods siding caters for a variety of traffic. Unloading one of the wagons is Station Assistant I. Burmeister.

Terminal station Koondrook is unique. Not only does the line run down the main street, but the passenger platform is set in the middle of the road.

Koondrook's goods sheds and sidings, on the banks of the River Murray, are among the most attractive railway locations in the State. The station last financial year railed 916 tons of goods outwards and received 2,704 tons.

The branch line, in addition to carrying general goods, serves a busy sleeper-cutting industry which sends nearly 2,500 sleepers every week by rail.

The local rail-motor service is the main transport for Koondrook area school children attending secondary schools at Kerang. The children make more than 9,000 passenger journeys a year.

(Reprinted from The Victorian Railways News Letter.)

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PLANNING IN N SCALE

By PAUL VAN LEUVEN

In last issue I described the use of separate terminals or "units" which could be used in a layout design or used on their own as shelf layouts. I will go more into detail here and also describe the construction of cheap but good terrain, scenery and ballasting work.

The unit track plan can be quite simple. One prototype terminal particularly suited for this is the Oberon line branch, which was mentioned on page 22 of the May-June 1968 issue of the *A.M.R.M.* This can be built on a 48" x 12" flat ¼" thick Pyneboard or you can use hardboard or Canite. The latter two must of course be reinforced with 2" x 1" dressed timber ribs. Pyneboard on its own does not require special reinforcing, but is dearer than other boards. Canite is the better material, it is cheap (obtainable second-hand from demolished buildings, sound-absorbent, and gullies and other scenery can easily be cut in or glued on it.

The track can be pinned directly to this base and ballasted. Extensions or return loops can later be added with ease.

Whether fixed or demountable, track joints should not fall on base joints, but instead a piece of 4" long flexible track can be used, held in place by the rail joiner. Platforms and other structures can be glued to the base and can be fabricated from materials such as card or balsa.

To paint such porous materials as cardboard and balsa, use a coat of varnish or sealer first before applying the final flat paint.

Road surfaces can best be made by brushing on a thin coat of wet plaster and paint it when dry.

If you do have to use Peco track in foam ballast inlay, do not glue the track to the ballast inlay but instead press-fit the inlay to the sleepers and apply P.V.A. glue under the edge of the inlay only, before fixing it to the base. Hold this down temporarily with weights or use pins.

Main lines or part of the overall layout that joins the units together is best made of the "hard shell" construction method. This does away with complicated framework and wire screen, as the plaster itself is strong enough to support the track and load, and offers economy in construction.

The road-bed can be made from Canite or even cardboard, as in this case it is only a guide where the track is to go. The scenery plaster is fixed over and under the roadbed so that it becomes homogeneous with the hard shell terrain. The basic frame is made out of 2" x 1" dressed timbers and consists of two bearers, laid flat, running lengthwise, on which the joists are fixed with glue and screws, spaced about 12" apart. Side and end frames (profile boards) are made from 3/16" Masonite or other hardboard. (See illustration.)

If the road-bed is made from Canite, it should be approximately 1½" wide and be cut out to proper curvature or straight pieces may be cut and slotted to allow bending to the required curvature. If the road-bed is made of cardboard, use only heavy-weight strawboard, and cut it out to correct curvature. Reinforce this with a 1" wide corrugated cardboard strip (obtainable from boxes) with the corrugation running vertically and fix with P.V.A. glue to the underside of road-bed to form a web. Tack this web also to the risers. Risers can be 2" x 1" or 1" x 1", cut to proper height and screwed to the joists. Fix scenery risers at random and fix masking tape between risers, road board and profile board. Overlap this with newspaper and add crumpled newspaper where greater height or hills are required.

You could also pre-determine your terrain and cut from cardboard a profile which is tacked to the joists, which enables you to get a better picture of the kind of terrain you will have. Hard shell is now applied to this prop-up by overlaying strips of paper towels, approximately 6" x 3" in size, and dipped into a plaster-and-water mix. The mix consists of two cups of moulding plaster to one cup of water. Always add the plaster to the water, and not the other way around. Mix well till the consistency is like batter, and the paper towel strips should be wetted with plaster on both sides. Apply this in criss-cross fashion to the newspaper and tape mock-up, overlapping each piece. Attach to actual wood support, cut a hole in the newspaper and attach to risers, adding more plaster here. The same is done when attaching to the road-bed. Slap it over and under. Continue until you have approximately three layers in this way.

If you have to break off the operation and start again, make sure that the old work is wetted again to form a good bond with the new work. Added detail such as cliffs and rock outcrop can be added at this stage, embedding pieces of broken Canite. Scenery is one of those things you cannot be told exactly how it is done; the method only can be outlined and it is up to you to get into it with both hands and try it out yourself —whatever suits you best—without even trying, you will never be able to do anything.

"Zip-texturing" is next and consists of applying a thin coat of wet moulding plaster by brush, and while wet sprinkle powder colour over it and brush this in so that we will get the basic colour of the underlying rock and earth, while dry powder colour, mixed with dry plaster (for adhesion), dusted on top of this gives us the basic soil overtones and texture to the scenery. A second dusting brings out the depth and grass effect. Coloured sawdust as sold by hobby shops is far too coarse and should *never* be used except where thick undergrowth is required such as in forests or timbered areas.

Applying the moulding plaster with brush in horizontal strokes creates weathered rock strata, while stippling produces more volcanic rock effect. Gullies can be made by applying water with a syringe or medical dropper over the wet surfaces. You will get the effect of natural eroded gullies. Colours most suitable would be burnt sienna, raw sienna, raw umber, chrome yellow, chrome green and viridian green. Use a small sieve to apply the colour dust and tap it while going over the terrain. Remember to vary rock and soil colour on different areas for best effect. Grass is not always bright green. Look around and you see it even in brown or yellow but mostly olive in colour. Pencil-dust gives good effect around coal dumps, while water pools and creeks can be made by applying a thick coat, or pouring clear varnish over the basic soil colour. Water it not blue, but has reflection effect, which is obtained from the varnish surface shine.

The road-bed can be trimmed by filling in low parts with plaster or shave off parts with a Surfoam plane or rasp. Pencil out your track plan direct on the hard shell and pin down the track. Apply the finest type of cork ballast material, previously blended and dyed to obtain the correct grey to light brown colour. and force it well down between the sleepers. Spray ballast with a solution of two drops of liquid laundry detergent (a wetting agent) mixed in a pint of water. Apply it with a hand spray to the ballast.

Thin down P.V.A. glue with water in a ratio of 1:1 to 1:3, depending upon strength or how quick drying you want it to be, and apply this with an eye-dropper to the ballast. One drop between the sleepers is enough, as the detergent-water mix helps to spread the glue throughout the ballast, and this will hold the track in place. When dry, brush off excess material. P.V.A. dries almost clear and gives some flexibility. For realistic appearance, paint the rails a rusty colour and, when dried, scrape off the rail top for current pick-up.

A recent test I made on the hard shell principle proved that the overall cost for a layout can be taken as approximately 20 cents per square foot. Next issue I will describe the making of trees and other line-side items.

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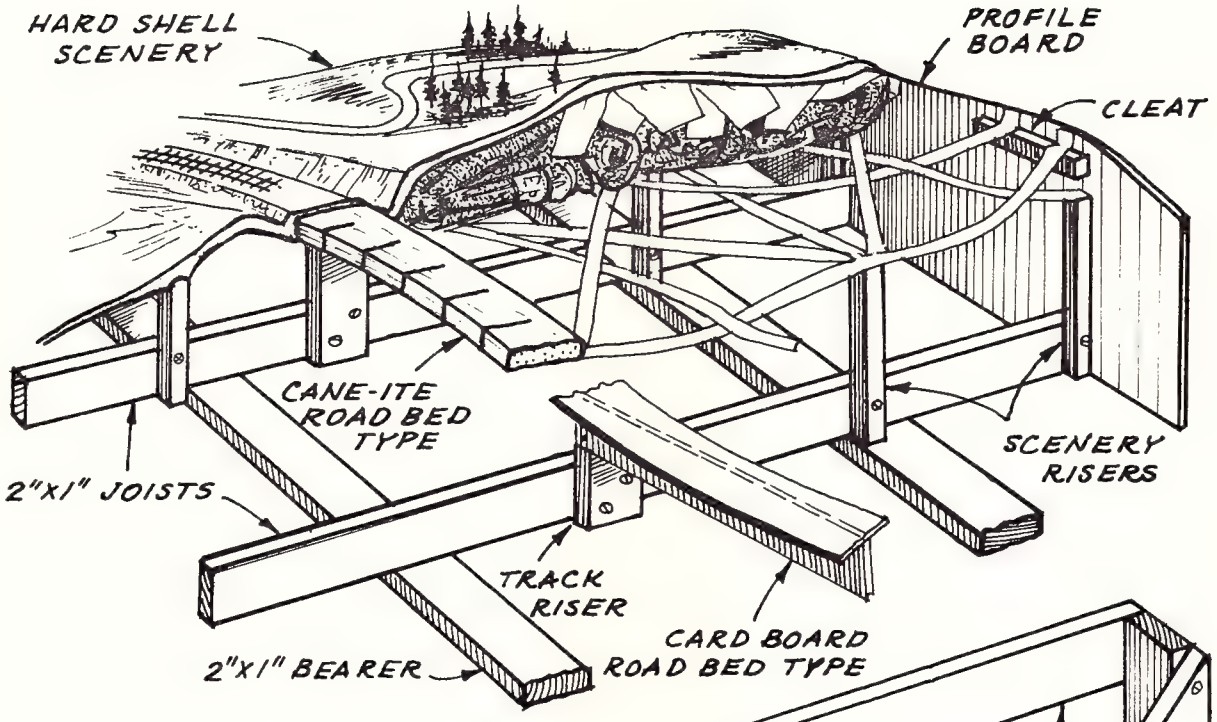
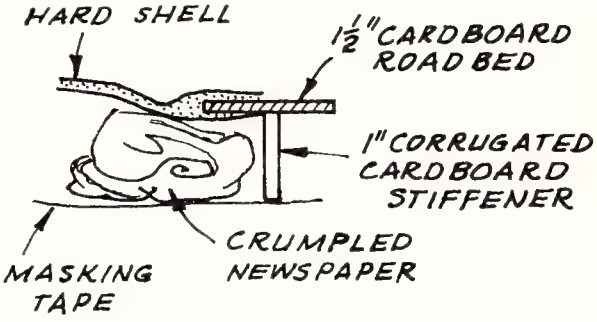
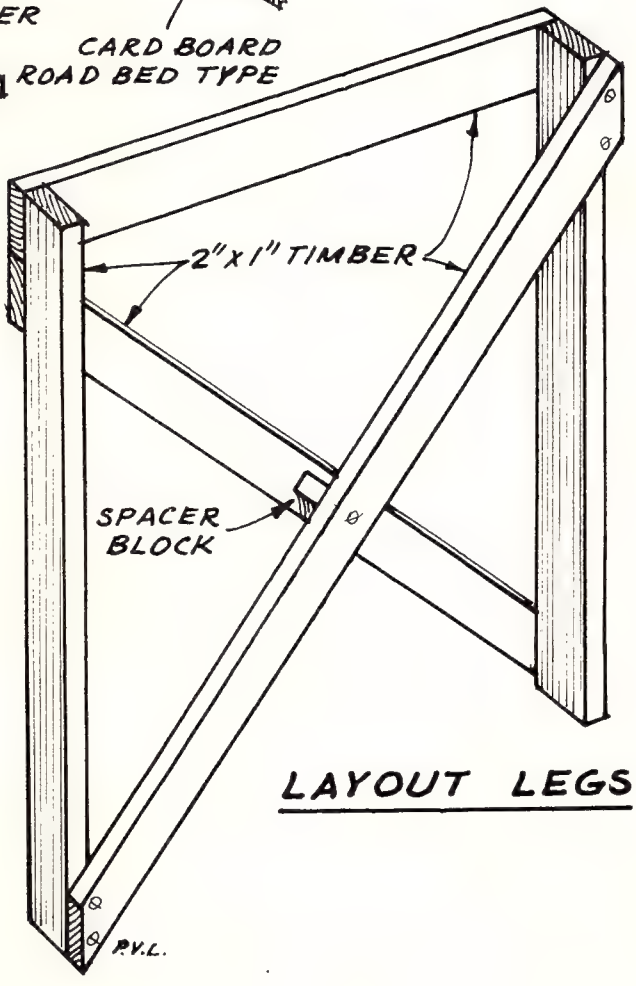


LAYOUT FRAME





LAYOUT LEGS

TROUBLE AT THE TIDEWATER

A recent advice from the General Manager told us that a couple of extra barges of junk would be arriving regular like at the docks served by the T.T.R., which gave the Motive Power and Rolling Stock Super. quite a headache. How was this junk to be moved —in what and with what? The solution came from Old Joe, who remembered that about 30 years back we had an old tank loco known to all as the 'Monster'; which was all very well, but no one had seen it in years. We finally found her under that mess of ivy at the end of the yard that we'd thought was a shed. That ivy was the really clinging type and as we couldn't pull it off we burnt it, which worked—the burning, we mean—and there stood our salvation, the most decrepit loco you ever did see. Well, we towed her into our very air-conditioned shops, where under the keen eye of the Master Mechanic the body was lifted, and cleaned up, the works worked on, checked over, tested. We even slapped on a bit of paint, but no one was quite sure if it was an improvement. Anyway it went, the loco that is.

Out back also we literally dug up a couple of gondolas that were amongst the first ever turned out by our shops. And they sure looked it. The gons received the same loving care from the shop staff, and they came into the yard sporting new wheels with scale flanges, new king-pins, and even new couplers from the Kadee Coy. Believe me, no pains were spared in getting those cars and the loco RIGHT.

Finally the call to arms. The Monster moved slowly, oh so slowly, out of the roundhouse and picked up her string of cars from the team track. It was fitting that the refurbished gons took pride of place next to the renewed loco. The pride that goeth before the fall.

She didn't even make it out of the siding. As No. 1 (the Monster's official number) passed slowly into the points, the leading bogie of the first car came off with a crunch. Rerailed and re-marshalled by hand, we tried the second car in the lead, then the third, but always the result was the same. Off

AUSTRALIAN MODEL CRAFT CO.

BOX 118, P.O., ALBURY, N.S.W. 2640

Advise revision of Price List for Group 19 lines, i.e. All HO/OO except PECO, RIVAROSSI and SCENIC LINES.

Locos, Rolling Stock, Permanent Way, Signalling & Components — *HO/OO*

BOOKLET 190 — HO/OO — GROUP 19

"AIRFIX" Plastic Kits. Fixed prices.

R-7: Diesel Shunter, 6-wheel	0.60	R-203: Interfrigo Refrigerator Car	0.80
R-201: Railbus	0.80	R-205: Saddle Tank Loco 0-6-0	0.90
R-202: Diesel Locomotive Crane	0.80		

"A.T.T." Ready-to-roll Freight Vehicles with X2F Couplers (Plastic). Fixed prices.

414: Santa Fe Box Car	2.85	466: Great Northern Cattle Car	2.85
437: Kraft Reefer	2.85	498: Santa Fe Caboose	2.85
459: Southern Pacific Hopper	2.85	499: B. & O. Caboose	2.85

"ERG" Accessories. Fixed prices.

Erg-1: Buffers, oval heads, packets of four	0.30	Erg-6: Sleepers in packets of 100 (brown plasticised fibre w/4 holes for spikes), packet	0.38
Erg-2: Buffers, round heads, packets of four	0.25	Erg-8: Scale Rulers (card), each	0.55
Erg-3: 3-link Couplers, packets of 1 pair	0.15		
Erg-5: Track Pins (not spikes), packet	0.11		

"GEM" Accessories & Loco Body Kits. Fixed prices.

Gem-1: Universal Point Levers, 3/16in. throw	0.50	Gem-7: Brake Hoses (U.K.) in cast white metal, pair	0.12
Gem-2: Signal Chain, brass, 23 links per inch. App. 1 yard	0.65	Gem-14: Lever Frame, manual, 4-arm	1.75
Gem-3: Ground Signals, white half disc or yellow semaphore type	0.95	Gem-15: Lever Frame, manual, 6-arm	2.50
Gem-4: Angle Cranks on horizontal base—each (but 12 in packet)	0.20	Gem-17: Lever Frame, elect., 4-arm	2.75
Gem-5: Angle Cranks on vertical base—each (but 3 in packet)	0.20	Gem-18: Lever Frame, elect., 6-arm	4.00
Gem-6: Chain Pulleys in vertical or horizontal bracket with short length of chain	0.30	Gem-21: Omega Loops formed in springy brass wire for use with point levers, etc., dozen	0.55

"HAMBLINGS" Driving Wheels, Axles, etc. Prices not fixed.

HAM-55: HO/OO 16½mm. 3-prong Track Gauge	0.25

"JACKSON" Wheels & Scale Screw Couplings. Prices generally in use.

Jack-1: Plain disc wheels, 12mm. diameter, per set of 4 on 2 axles	2 pairs	0.35
Jack-2 Disc wheels, three-hole, 12mm. diameter	2 pairs	0.35
Jack-4 Plain disc wheels, 14mm. diameter	2 pairs	0.35
Jack-5: Spoked wagon wheels, 12mm. diameter	2 pairs	0.35
Jack-7 Plain disc wheels, 10½mm. diameter	2 pairs	0.35
Jack-8: Loco Tender wheels, heavy appearance, spoked 14mm. diameter	2 pairs	0.55
Jack-9: Loco Tender wheels, heavy appearance, spoked 16mm. diameter	2 pairs	0.55
Jack-10: Scale Screw Couplings, in packets of two	per pair	0.80

"K's" Locomotive & Rolling Stock Kits & Accessories. Prices not fixed.

LOCO KITS (Full kits, including paint)		**COACH KITS (Metal)**	
K's-3: L.N.E.R. (Ex N.E.) J72 Tank Loco	16.50	K's-30: G.W.R. 6-wh Tri-comp. clerestory roof coach	3.25
K's-10: G.W.R. Dean Goods "2301" 0-6-0 with tender	19.75	**COACH KITS (Plastic)**	
K's-13: L.M.S. 0-4-4 Standard Passenger Tank Loco	17.50	K's-70: G.W.R. 40ft. Parcels/Brake Van	3.25
K's-14: G.W.R. Pannier Tank 57XX 0-6-0	16.50	K's-71: G.W.R. 57ft. Brake-Compo	3.85
K's-15: L.M.S. Class 5 Loco 4-6-0 with tender	30.95	**FREIGHT VEHICLE KITS**	
K's-17: L.M.S. 0-6-0 Kirtley loco with tender	19.95	K's-44: G.W.R. 20t Mineral Wagon	1.35
K's-18: S.R. Terrier 0-6-0 Tank	16.50	K's-49: G.W.R. 6-wh Low Siphon	2.75
K's-20: G.W.R. 63XX 2-6-0 Mogul with tender	24.50	**ACCESSORIES**	
K's-22: L.N.E.R. 2-8-0 R.O.D. Loco with tender	24.95	K's-100: B.R. Coach Bogies, pair	1.35
K's-24: L.M.S. Fowler 2-6-2 Tank	20.95	K's-101: 6mm. Brass Wheels, loose, dozen	0.45
K's-25: G.W.R. 14XX 0-4-2 Tank	16.50		

"MAC" Hardware (Brass), Springs & Gears. Lines are packeted and marked with fixed prices.

Mac-1VC: Van corners, w/rivet detail, pkt. of 12	0.45	Mac-1BB: Boiler Bands, pkt. of 12	0.45
Mac-1WC: Wagon corners, w/rivet detail, 1½in., pkt. of 12	0.45	Mac-3: Brass ladder, 6in., each	0.25
Mac-1DR: Van door runners, 2in. long, pkt. of 12	0.45	Mac-4: Tension springs 2mm. dia. Short ½in., Medium ¾in. or Long 1⅛in., per pkt.	0.25
Mac-1WS: Vehicle strapping, rivet detail, 3in. long, pkt. of 12	0.45	Mac-5: 30:1 Worm and Gear Sets	0.75
Mac-1A1: Angle iron, 1/32in. x 1/32in., 1½in. long, pkt. of 12	0.45		
Mac-1A2: Angle iron, 1/16in. x 1/16in., 2½in. long, pkt. of 12	0.45		

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TERMINAL RAILWAY

BY CHARLES HUGGARD

they came. The P'way man was called and on checking, he pronounced the track A1—flangeways, checkrails, the lot. Finally, in desperation, our lynx-eyed M.M. took No. 1 slowly through the points again, watching the antics of that leading bogie. What he saw was that the buffers on No. 1, which gave her so much character, were fouling the buffer beam of the car. We had failed to take into account that the new couplers were so much shorter than the old loop and hook. So off with the buffers.

So off we go—or do we? This time the cars derailed on the curve. Again the M.M. deduced the trouble. That scraping noise proved to be the scraping of the wheels on those new-fangled couplers. So now we are probably the only railroad without securing lugs at the side of the couplers. That job took all night.

Next morning we were really ready to roll, and with a confident blast of her whistle, No. 1 moved out of the siding. The first car passed the points and on to the curve without a tremor. Smiles all round became a little sick as that second car came off, which was really damaging to the ego of the M.M. So out with the tape and under the car. There he lay on his back, just looking, till we thought he'd really gone to sleep. That's when he emerged with a triumphant grin. Them centre sills, he explained, was just about 8 inches too wide, and was grabbing the wheels on the curve. Which adjustment was rather involved, but was nevertheless accomplished in time for the arrival of those extra barges of junk.

The outcome of these episodes was a top-level conference between the M.P.S. and M.M. at the Local one evening, but that's quite another story.

Do things like this happen on your R.R.?

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Locos, Rolling Stock, Permanent Way, Signalling & Components — *HO/OO*

BOOKLET 190 — HO/OO — GROUP 19

"RATIO" Plastic Wheels & Signal Kits. Fixed prices.

Rao-2: Spoked black plastic wheels in packets of 4 axles	0.25
Rao-7: Lower Quadrant Signal Kit, single post type in black and white plastics (makes two)	1.00
Rao-8: Lower Quadrant Signal Kit, gantry type with up to 4 arms, black and white plastic	1.75

(Other combinations are possible if Rao-7 and Rao-8 are used together.)

"ROMFORD" Driving Wheels & Axles, Tender Wheels, Motors. Prices not fixed — widely accepted.

DRIVING WHEELS	
15, 18, 21 & 24mm. diameter	
Rom-1: Insulated and flanged, each	0.75
Rom-2: Insulated, flangeless, each	0.85
Rom-3: Uninsulated, flanged, each	0.30
Rom-4: Uninsulated, flangeless, each	0.35
14, 20, 26mm. diameter	
Rom-5: Insulated and flanged, each	0.85
Rom-6: Insulated, flangeless, each	0.95
Rom-7: Uninsulated, flanged, each	0.35
Rom-8: Uninsulated, flangeless, each	0.40
DRIVING AXLES WITH NUTS	
Rom-9: For HO/OO 16½mm. gauge, each	0.30
OTHER ITEMS FOR DRIVING WHEELS	
Rom-21: Extended axles for inside frames, each	0.35
Rom-22: Cranks for ext. axles, each	0.30
GEAR SETS	
Rom-15: Ratio of 30:1 or 40:1, each	1.45
VALVE GEAR	
Rom-25: Connecting Rod & Crosshead Set (G.W.R. pattern)	2.00
LOOSE SPOKED HEAVY DUTY LOCO TENDER OR BOGIE WHEELS	
Rom-11s: 9mm. or 10½mm. diam., each	0.25
Rom-11L: 12, 14 or 16mm. diam., each (Press fit on Peco R-5 Insulaxles for 2-rail operation.)	0.20
SPECIAL TOOLS	
T1s-1: Special Screwdriver for axle nuts, each	0.60*
MOTORS	
Rom-13: Phantom 5-pole 12V. D.C. motor with gears, each	6.00
Rom-26: Series 4 motor, 7-pole, 12V. D.C. with gear box and axle, each	9.00
Rom-27: Series 5 motor, 7-pole, 12V. D.C. with flywheel and gears, each	8.00
Rom-14: Terrier 7-pole 12V. D.C. motor without gears, each	4.50

* Exempt Sales Tax.

"ROUNDHOUSE" Plastic Kits.

Stocks of "Roundhouse" lines are to all intents and purposes exhausted, but a new range from "Roundhouse" is expected to arrive in November.

"SENTINEL" Loco & Rolling Stock Fittings. All lines in packets at fixed prices.

L-3B: Steam Generator, Pyle type	0.20
L-6B: Headlight, type 2, hooded	0.20
L-7B: Cross Compound Air Compressor	0.30
L-10B: Headlight, type 3, U.S.A. style	0.20
L-11C: Handrail Stanchions, packet of 12	0.30
L-12B: Pilot/Cowcatcher, type 1	0.40
L-14P: Handrail Wire, 30in. length	0.15
L-17W & R: Marker Lamp "Lights"—in clear or red, packet of 12	0.20
L-24BW & R: Marker Lamps with "Lights" in clear or red for aprons, per pair	0.20
L-28BW & R: Marker Lamps, elec. type, clear or red lights, per pair	0.20
L-29B: Compressor, NSWGR single phase type	0.20
L-36B: Air Tank, shorter type	0.20
L-45W: Clear "Lights" for L-10B, packet of 6	0.20
L-46X: Brass Bell and bracket	0.20
CL-1: 3-aspect Marker Lamps with "lights", per pair	0.25
CL-2B: Elesco Feedwater Heater and Pump	1.00
R-1P: Dummy Knuckle Couplers, 2 pairs	0.35
R-2B: Guard's Lookouts NSWGR MHG, per pair	0.35
R-4C: Torpedo Vents, dozen	0.25
R-7B: MHG Van End, Louvred, NSWGR "MHG", each	0.50
R-9B: MHG Van End (other end), each	0.50
CR-1B: Brake Gear Sets, 3 pieces	0.40
CR-2C: Vents and flue for MHG, set	0.40
CR-3C: X2F Couplers with draft gear, per pair	0.55
CR-4C: X2F Couplers with bottom pockets and springs, per pair	0.40
E-1: Positioning and height gauge for X2F couplers	0.25

See also the Scenic Section for other "Sentinel" lines.

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BOOKLET 40 — All O, TT-3 and Narrow Gauge Lines. Illustrations and price list	Free
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Available to dealers throughout Australia and from dealers to you

One of the latest type of T class. Note the twin exhausts.
(Photo: Barry Brown)

BUILD YOURSELF A MODEL 'T'

by Russ Siddall

In our last issue we began a series of articles describing the construction of a 'T' class diesel locomotive of Victorian Railways. Part one told about the construction of the chassis and mounting the motor, and we finished up where we had a fully operational unit, but without a body. Now we go on to make your loco look like a 'T' class.

Part 2. Hoods and Cab

Lay out the shape of the hoods on tinplate or brass, making each end separately, and laying them out so that the sheet metal will be bent lengthwise. The ends will be bent up separately and soldered in later. Note that the long hood is wider than the short one, and that it bends in at the car end to the same width as the short one. This is not difficult to do, and should not be left out as the appearance of the model will suffer if the hood is made without it.

Cut out a rectangle of metal for the short hood, 7 feet long and about 19 feet wide (I made mine oversize and trimmed off the excess afterwards). Mark where the bends are to be made, and bend over a straight flat file or something similar. The object is to get rounded bends, not sharp ones, and you may need several tries as the width of the hood must be correct.

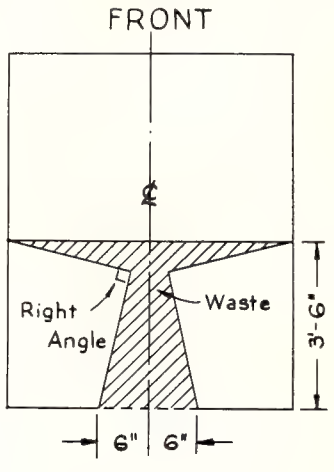
When you are satisfied with the short hood, go on to the long one, which is cut 30 feet long and 20 feet wide, and then bent up in the same manner. When you are satisfied with both hoods, place them upside down on a flat surface and scribe a line 7 feet from the surface all round. Then trim off any excess material. This will give you two hoods which will sit flat when right way up, and the same height.

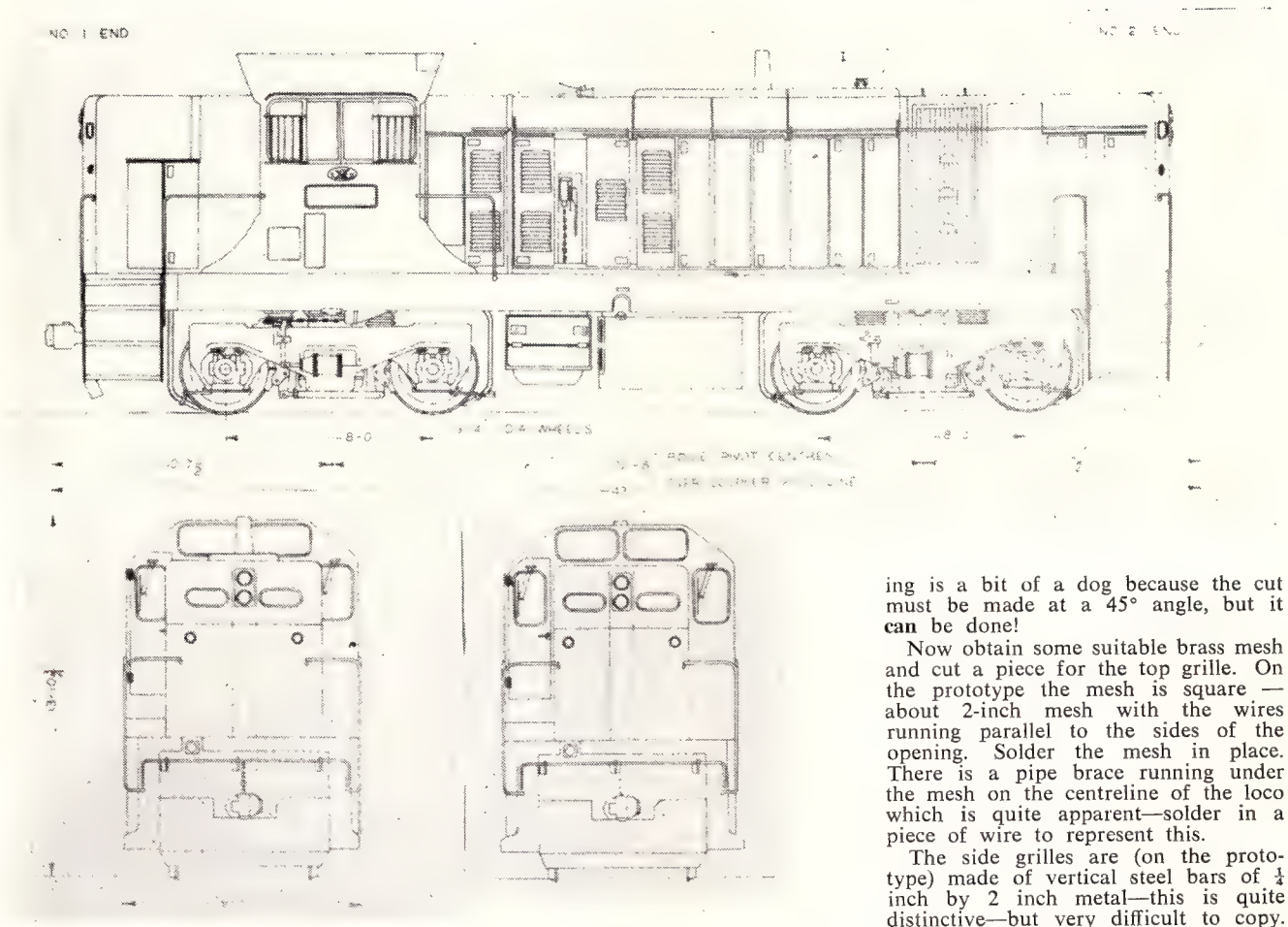
Now measure 3 feet 6 inches in from one end—which will become the cab end—of the long hood, scribe a line across the top. Now mark the centre line of the hood back to the cab end. The hood has to come in a scale foot, so at the cab end measure 6 inches each side of the centre line and join these points to the point where the centre line meets the cross line. Now from the ends of the cross line draw two lines back to the angled lines so they meet at right angles. Figure 1 will show you what I mean. Cut out the shaded area with a jeweller's saw and then bend the sides in. You should get a neat joint along the top; solder a small square of metal underneath to strengthen the joint, and fill any gaps in the top with solder.

The ends come next—both are made the same way but are different widths to match the different ends. For the long end, cut the metal 7 feet high and about 15 feet wide. Mark out the two verticals a foot apart in the centre for the centre bends and make these bends. Judge the amount of bend by eye until it looks OK.

Then offer the metal up to the hood, and mark out where the bends must be made to form the curves at the sides. Now mark vertical lines just where the flat part starts at the sides and cut off with tinsnips. If everything is right, the ends will match the hood, which must now be cut to the correct

Fig. 1





length, allowing for the metal coming 'round the corner' on the ends, but leaving a projection on the flat top to match the plan view of the end.

When you have got these right, true everything up and tack solder. Check for accuracy and then flow solder right round the front. Run a good fillet inside the top of the end where it will be filed to give the rounded contour. The other end of the hood is done in exactly the same way. File the tops of the ends smooth and clean up where necessary.

Now we will make the headlights. Obtain some 10BA cheesehead screws and drill two holes just far enough apart **in some scrap metal** for the screws to not quite touch when they are 'home'. Mark out the shape of the rectangular surround on the metal, cut out and round the corners with a file. Now solder this in place on the end and redrill the holes right through the front of the hood. Run two screws right home and solder from the back to make sure they cannot move. Then file the screws down until they are not more than about a scale inch in thickness.

Now mark out the position of the recess for the handbrake lever on the right side of the long hood. Solder a slightly thicker piece of soft metal behind this area, and then drill and file out the opening. This is on one side only.

Now build up the brake lever from scraps of brass on the surface of a flat piece of metal, which is then soldered in the hood so that the brake is properly positioned in the opening.

The raised hatch covers in the centre of the long hood are made out of a single flat piece of brass a scale 5 inches high, and a scale 2 feet 10 inches by 10 feet 6 inches in size.

Round off the top corners all round with a file and then cut the piece into one piece 6 feet long, and one piece 4 feet 3 inches long. Solder the smaller piece 14 feet 6 inches from the cab end of the long hood with the flat end facing towards the cab. Then solder the larger piece next to it, leaving a gap of a scale 3 inches between the two pieces.

Next step is to cut out the holes in the long hood for the grilles. The top one measures 4 feet 9 inches by 3 feet 4 inches and is 3 feet 6 inches from the end of the hood. The side openings are 6 feet by 2 feet 6 inches and are located just 3 inches behind the rear edge of the top opening.

Mark out all three, drill a starting hole, then cut out roughly well within the lines with the jeweller's saw and then file to final shape. You will find that the top cut on the first side opening is a bit of a dog because the cut must be made at a 45° angle, but it **can** be done!

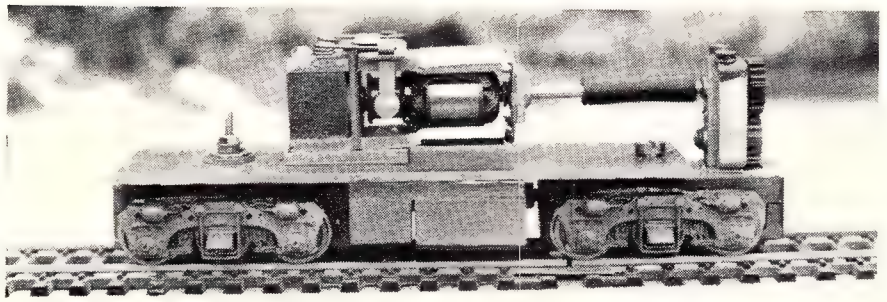
Now obtain some suitable brass mesh and cut a piece for the top grille. On the prototype the mesh is square — about 2-inch mesh with the wires running parallel to the sides of the opening. Solder the mesh in place. There is a pipe brace running under the mesh on the centreline of the loco which is quite apparent—solder in a piece of wire to represent this.

The side grilles are (on the prototype) made of vertical steel bars of $\frac{1}{4}$ inch by 2 inch metal—this is quite distinctive—but very difficult to copy. Instead, I made mine by stretching copper wire until it was dead straight, cutting off 15 or so 30-foot lengths, and soldering the grilles out of this.

Here's the easy way to do it. Get a chunk of caneite (must be flat) to make the jig on. Now cut a $\frac{3}{4}$-inch wide strip of scrap tinplate into about 30 triangular pieces — freehand — it doesn't matter what shape they are so long as the points are good and sharp and they're all the same thickness of tin. The thickness will be the size of the spaces between the verticals in your grille.

Now take the first piece of wire and push spacers down each side of it at both ends. You should be able to do this with your fingers — this is the reason for using caneite—it's nice and soft. Now place the next wire alongside—put in two more spacers, another piece of wire, more spacers. Keep going until you have enough width to more than cover the openings in the sides of the hood.

Now mark where the top and bottom of the openings will come and solder pieces of the same wire across at right angles just on the outside of the marks. Leave plenty of overlap—this will be trimmed off later when the grilles are soldered into the hood. You should be able to get two grilles out of the 30-foot lengths—you might need to put extra spacers in the centre of the wires to



This is how your chassis should look when completed.

keep them straight. When both grilles are soldered up, take them off the jig and cut them apart. Cut the vertical wires just next to the cross pieces with a jeweller's saw, and you are ready to fit them to the loco.

File the ends of the grille carefully until it will fit into the hood in the correct place, then solder the ends of the top cross piece to the inside of the hood about half an inch away from the verticals. There will be no fear of melting the works this way. You will have to be a bit more venturesome with the bottom—it is more exposed and should be soldered directly to the thin strip of metal at the bottom of the opening in the hood. Now you can trim off the excess cross wires and do the same for the grille on the other side.

There are three foot-openings on the right hand side grille only—I am going to cut these out of shim and stick them in place with Araldite cement.

Next step is to solder two pieces of flat tin or nickel silver together (I used N-S because it is easier to work) and mark out the cab ends. Drill saw and file the windows to shape—note that all windows have rounded corners on the ends. Allow for the thickness of the metal in the sides when laying out the ends—the sides will be soldered outside the ends—it's easier to get 'em straight this way.

Cut out, file to the scribed lines, unsolder the two pieces and clean up where there are blobs of solder. Now solder the cab ends onto the hoods, making sure they are central and square. Do the soldering from the inside to minimise cleaning up.

Now lay out the footplate (or is it floor on a diesel?) on flat metal. This is 43 feet 6 inches by 9 feet 3 inches, and has 3 feet 3 inches by 9-inch notches cut at each corner where the steps come. The corners of these notches are cut at an angle but we will file these the right shape later when the side skirts have been put on. The motor should fit neatly in the long hood. If it doesn't you will have to cut an opening in the cab wall (end) so the magnet can come slightly into the cab. Do this now. Another jeweller's saw and files job.

Now set the two hoods in place on the footplate, with the ends just level with the footplate ends. The overall length of the cab is 6 feet 3 inches—if yours isn't then get out your ruler and find out why—and fix it. Now solder the hoods to the floor. Tack-solder in a couple of places until you are sure they are straight, then flow a fillet all round. Be careful where the grilles are —you don't want to melt them at this stage.

Now lay out the sides the same way as you did the ends, making sure you have the right cab length to exactly match the space available on your model. Nobody will notice 3 or 4 inches error in the length, but they'll see it if you're short by that much! Cut and file the windows and the outline, but NOT the two openings near the bottom of the cab side. These are reversed on the other side—the square hole is nearer the middle—so cut them out after you have separated the two pieces of metal. The two centre windows are sliding sashes which go behind the outside ones, so cut them out as one large opening. The centre vertical will be soldered in on the inside surface of the side to represent this. Do it.

Now set the sides in position on the model and check for squareness. If all is OK then solder them in place from the inside. Run solder along the footplate join also—this will have to be from the outside.

Now mark out the space necessary for the motor and other machinery and cut it out. Start by drilling a hole in the cab floor and cut out the floor with the jeweller's saw. Leave a 'step' of about 6 inches all round for strength—particularly at the sides. Now use the Zona saw to cut out under the long hood, up to about 2 feet from the end. Then bend the piece to be removed back and forward until it breaks and finish file. You will probably have to file the footplate right back to the hood sides where the brushgear is, and also at the end where the gear train is, depending on how sharp your curves are.

Now fit the body onto the works to see how it looks and fits. You may find that the motor sits a bit high. If this happens you will have to reduce the height of the motor mounting spacer.

Next edition we will continue with the detailing of the locomotive.

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THE DIESEL LOCOMOTIVE

By Loco

In the March-April 1968 copy of this publication I described the principle of the diesel electric locomotive and I now propose to deal with the diesel mechanical and diesel hydraulic type locomotives. The description of the diesel motor or engine given in the earlier article will also apply in the two types now to be described.

Diesel Mechanical Locomotive

This is the simplest form of transmission and is employed in the lower powered diesel railcars and shunting locomotives. The engine drive is taken through a gearbox not very dissimilar from that of a motor car. Control arrangements include a gear selector, a forward and reverse lever and an accelerator.

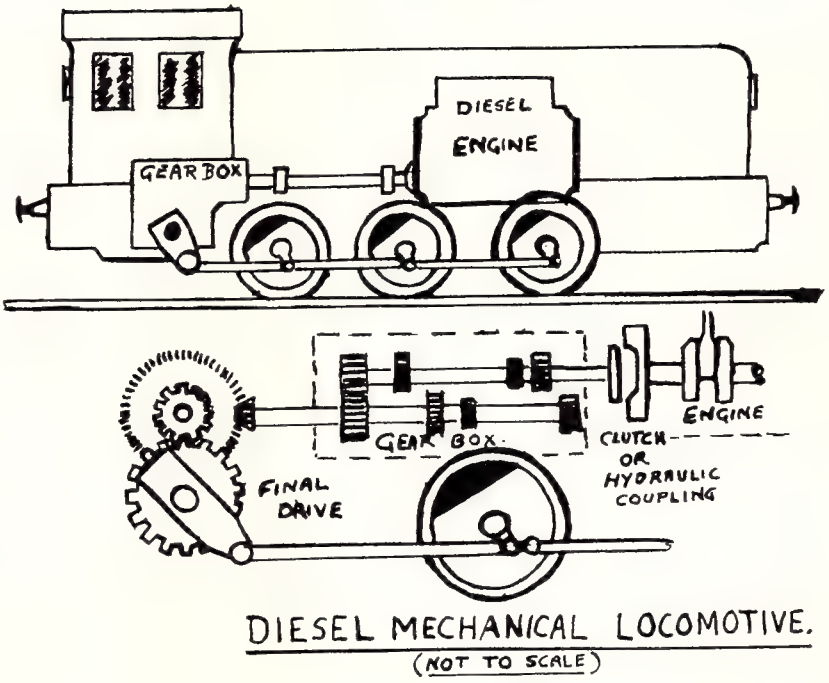
Some gearboxes use clutches in each gear range; others use the epicyclic principle—similar to the sun-and-planet wheel arrangements of the speed gear on a bicycle—having brake bands to select the respective gears. Instead of a clutch a hydraulic coupling is now frequently used with gear drives, and acts like a clutch without wearing surfaces. Gearboxes normally employ three to six speed changes in both forward and reverse.

Diesel Hydraulic Locomotive

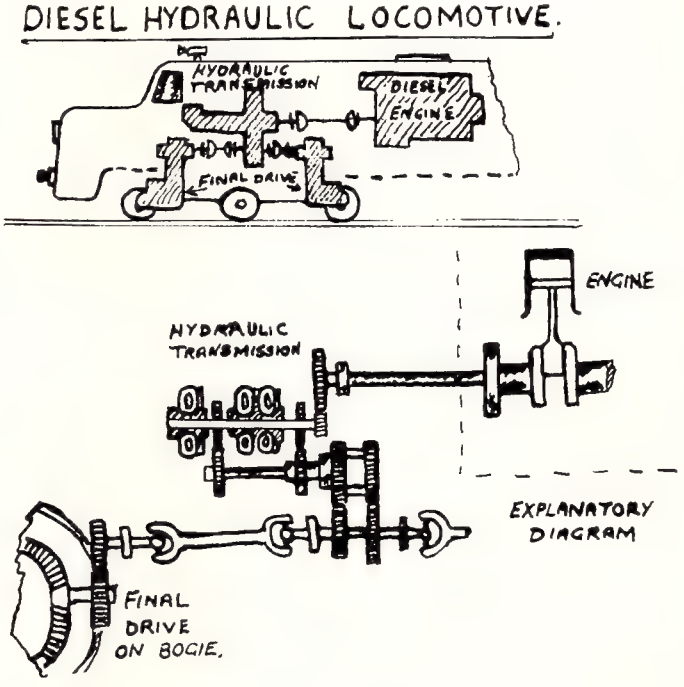
The hydraulic transmission employs what is known as a fluid torque converter which, like the mechanical and electric drives, increases the turning movement of the diesel engine and passes this increased torque to the road wheels. The torque converter is like a simple reaction turbine using fluid as the medium of power in place of steam.

The build up of torque is therefore smooth and continuous with a simple throttle control on the diesel engine, the speed of which is varied to meet the requirements of load and locomotive speed.

The converter is sometimes used with other converters or couplings to cover the wide speed range of the locomotive. Rigid frame locomotives employ a jackshaft and side-rod final drive and, in the bogie locomotive, power is transmitted to the driving axles by means of Cardan shafts.



DIESEL MECHANICAL LOCOMOTIVE.
(NOT TO SCALE)



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S.A.R. COMPOSITE BOGIE GOODS VAN

by Charles Huggard

I have long needed a combine vehicle for light branchline passenger business, and the announcement that a pass. vehicle would be included in this year's Flinders M.R.S. competitions triggered off the search for a suitable prototype. As I have gone almost completely Australian, I naturally checked my bound copies of A.M.R.M., and found my vehicle in Vol. 1, No. 5. The accompanying photo is not the best from a modeller's point of view, but combined with a good plan and explanatory notes, is sufficient to produce a satisfying model.

I chose styrene as a suitable medium for this smooth-sided car. I use a surgical scalpel to cut the styrene. Several light strokes will cut through the thinner material, and after having been cut part-way through, the thicker styrene may readily be snapped off. Smooth off with a file before using. Chloroform is used as a bonding agent to join all plastic parts. Perspex is worked with saw and file.

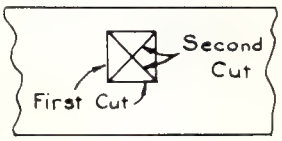
Main requirements are 5, 10, 20 and 30 thou. styrene, $\frac{1}{8}$th in. perspex, step casting, trucks, couplers, ventilators, wire for railing and grabs, brass strip for guard and shunter steps.

From the perspex, cut a floor of the car, 28 m.m. by 126 m.m. Scribe the centre line lengthwise, and locate and scribe bolster centres. Wipe over general locations with black Texta colour prior to scribing so you can see the markings better. Attach the steps to the correct end, ensuring that the platform is flush with the *underside* of the flooring. I used an imported casting that had been lying around for some time. I think the Sentinel steps, R16, would be a better proposition. I used Pliobond as the adhesive. My Kadee couplers were attached at the step end with the same material, and at the other end with a drop of chloroform. Put the unit aside for at least 24 hours to set.

Cut some strips of 30 thou. styrene 3 m.m. wide. Use these for buffer beam and side sills. The buffer beam is flush with the end of floor, and the side sills are placed about 2 m.m. in from the edges. Fit a 10 m.m. square of perspex for the body bolster, or use a commercial type pliobonded on. To attach the trucks I drilled and tapped 10 B.A., and locked up with a 10 B.A. nut after allowing sufficient play. Place on track to check coupler height, and make any necessary adjustment.

I also had to fit a buffer beam at the step end. I pliobonded some $\frac{1}{8}$th in. square basswood to the casting, allowed 24 hours for setting, and shaped with a file.

Next prepare the bulkheads. From a piece of perspex 28 m.m. wide, cut four pieces about 30 m.m. long. Approx. 5 m.m. from one end scribe a line at right angles to the sides. Using a 29-oz. fruit can as a guide, scribe the roof contour, passing the curved line through the intersection of previously scribed line and bulkhead sides. Clamp these four pieces together and drill two holes $\frac{1}{8}$th in. diameter. Firmly bolt the pieces together, and with jeweller's saw and file, shape the roof contour. Cut off bottoms at 23 m.m. from roof-top.



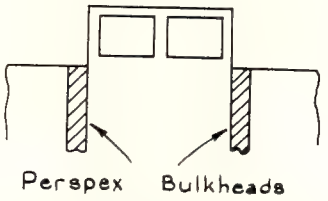
SKETCH 1

On the dull side of 20 thou. styrene, lay out the car sides, to include the cupola and vestibule supports. Note that the window arrangement at the pass. end differs each side on account of toilet. Cut out all the pass. window space in one piece. To cut out the small windows and door panels, first cut around the outline, using steel rule and scalpel and light strokes. Then cut diagonally across each window space and window will put out easily. See Sketch No. 1. Clean up openings with fine file. Scribe door outlines, using steel rule and scalpel point, or other suitable tool.

From 20 thou. styrene, cut several strips approx. 1.5 m.m. wide. Do not cut right across the stock, but allow the ends to remain joined. This will prevent curling of the strip. Nip off by cutting at right angles to strip. Use the strips for the sills of pass. compartment, guard's door, toilet and goods compartment windows. Also for uprights of pass. compartment windows and safety strip outside these windows.

Assemble sides to bulkheads with ends flush, and the two inside ones with faces in line with outside edge of cupola. See Sketch No. 2. Fit plain cover of 20 thou. to goods end of van. On a

FITTING CENTRE BULKHEADS



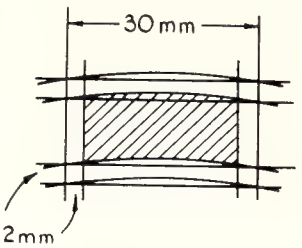
SKETCH 2

similar piece of 20 thou., lay out the vestibule end, cut out window and door panels, mark in door, and attach to end of car. File up the edges.

From 5 thou. stock, cut out pieces to fit behind door panel cut-outs. Fit in place, keeping the top edges below window-level, so that you can more easily fit your 'glass' later.

Mark a line inside the car $\frac{1}{8}$th in. up from the bottom. Fit 4 m.m. by 5 thou.

MARKING OUT CUPOLA FRONTS



SKETCH 3

strips of styrene along this line between the door panels and the bulkheads to give a smooth face on which to add your bracing of 4 m.m. by 30 thou. styrene. File 5 thou. off the floor where the door panels reach the bottom of the car sides, and the body should fit snugly over the floor.

On 20 thou. stock, mark out the cupola ends. See Sketch No. 3. The curve is marked in with the fruit can. Also use the can as a guide when cutting out the cupola and window areas. Proceed in this way. (1) Remove the cupola window areas (shaded area in sketch), (2) fit the uprights, (3) separate the cupola from the stock, allowing a

The completed model.

(Photo by Laurie Jackson)

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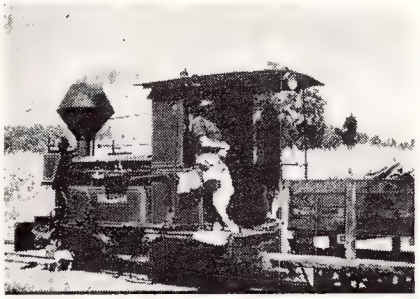

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little extra at the sides for fitting. Try for fit, and if necessary use your file so as to obtain a neat fit on the edge of the bulkhead. File up for a clean outline. Fit bracing of 4 m.m. by 30 thou. styrene to top inside edges of car sides including cupola, and similar size bracing to top centre line of car and cupola. Chamfer edges to conform to roof line.

From 5 thou. stock, cut several strips about 40 m.m. wide. Take a suitable length and attach to one edge of car roof, ensuring close fit to cupola. Allow about 3 m.m. overhang at the side. When *thoroughly* fixed, roll sheet over and attach to other edge of car. Run bonding agent along bulkheads to fix all round. Repeat process at other end. Apply a second skin of 5 thou. styrene to roof, bonding all round the edges. A strip of 10 thou. fills in the roof line across the cupola.

Using your fruit can as a guide, cut a strip 2 m.m. wide to fit between the vestibule roof supports. Cut another piece 1½ m.m. wide to fit under the roof at the vestibule bulkhead. Use 1 m.m. strips to fit up under the eaves on the car sides. Trim the roof edges by holding a steel rule against the moulding and filing the roof edge level.

Now proceed to fit the cupola roof, using two skins of 5 thou. styrene. Trim up with about .5 m.m. overhang all round.

Attach a small square of 30 thou. styrene to inside the toilet roof. Locate and drill for ventilators, and attach same. Fit grabirons.

I painted the inside of my Composite a light fawn. At the vestibule end the clear bulkhead becomes the window in the door, so no paint here, please. Allow at least 24 hours between each thin coat of paint. When satisfied with the inside, the outside may be attended to. Place under cover during the drying period.

Whilst the painting is going on, you may also be working on the chassis. Make up the guards, and shunters, steps from 1/32 by 10 thou. brass strip. Drill small holes in side sills and buffer beams at proper places at underfloor level and squeeze steps in place. See Sketch No. 4.

Lay out end railings on a sheet of paper, the uprights located to suit your buffer beams if these have been previously marked. I used a strand of copper wire for my railings. This was stretched, using vice and pliers. I strengthened each joint with a strip of 5 thou. brass, cleaning up with needle file before fastening in place with solder and hot iron. If you don't wish to risk melting your step casting, use a dab of Araldite. Allow adequate time for setting of this adhesive.

The photo gives only a hint to the layout of the components under the car. However, I made up a couple of battery boxes from ⅛th in. perspex, a toilet pressure tank of perspex tubing, and a toilet drainpipe of plastic tubing. These, together with a combination brake cylinder and generator from B.P.R., were fitted in appropriate places. The centre sill is a length of N.E. freight sill, but one can easily be built up from styrene.

The under cart is painted Humbrol matt black. The hatches over the steps were painted silver-white at the time the steps were painted, and are attached with a dob of Pliobond.

I drilled and tapped 10 B.A. into the centre bulkheads to fasten the two parts of the car together.

Window glass is clear plastic cut to shape and held in place with tiny dobs of Pliobond applied with sharpened ⅛th in. dowelling or swab sticks. Toilet window is 'frosted' by lightly rubbing the plastic with fine sandpaper. Bars are scribed on.

[*A copy of the plan is available from SCR Plan & Print Service. See Page* 20—*Ed.*]

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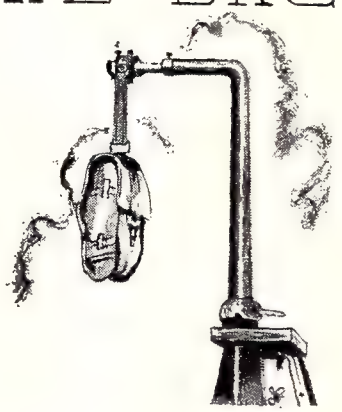

Sir,

I feel some comment is necessary concerning the review of the book "700" recently published by the South Australian Division of the Australian Railway Historical Society and discussed in your "Armchair Review" of the July/August issue of A.M.R.M.

The criticism of your reviewer tends to suggent he was somewhat confused about the intended purpose of this book. The odd photograph of poor quality has no doubt been included after due consideration to illustrate a particular point of the text and, in fact, would hardly have been included if it was not relevant. The small outline diagrams are intended to enable comparisons to be made of significant features of the different classes of locomotives within the 700 series. Your reviewer rejects the erection diagram on the basis of its complexity. However, its "academic interest" is not to be so easily dismissed by those interested in the mechanical features of these locomotives. Like the remaining illustrations, this drawing has been chosen for its relevance to the text.

It must be pointed out that neither the authors nor the Australian Railway Historical Society ever intended that the book should be used for modelling purposes although I am sure all concerned would be happy to know that some of its contents are suitable for this purpose. The paramount function of "700" is an historical record of a particularly outstanding and significant series of steam locomotives in South Australia. We may be sure that the accuracy of the text is commensurate with official South Australian Railways and other records, made freely available to the authors.

J. G. SOUTHWELL

Burnside, S.A.

Sir,

Regarding Mr. Rod Goodrick's letter in the July/August AMRM, between Oberon and Tarana the only regular train in each direction Monday to Saturday is the mixed, connecting with the Central West Express to and from Sydney. There are however, several goods trains conditionally tabled which would only run if traffic was offering.

From March, 1963 until the introduction of 48 class d.e.'s to the Lithgow-Bathurst area in mid 1967, 49 class almost exclusively worked the line, with an occasional 45. However, this duty is now almost always entrusted to a 48, usually the unit off the up Mudgee Mail, which works a pick up goods to Tarana, conveying loading for Oberon. Arrival at Tarana would be in time to work No. 5 goods (if running), returning to Lithgow in time to work the Mudgee Mail at 1.19 a.m.

Loads on this line are quite light. Between Tarana and Hazelgrove a 48 or 49 class is restricted to 230 tons, whilst all trains operating Oberon-Tarana are restricted to 380 tons.

The query on rolling stock codings would best be answered by obtaining a copy of the "N.S.W. Digest", which recently ran a series on codings and descriptions of all passenger and goods rolling stock. These are obtainable from the Australian Railway Historical Society (N.S.W. Division), Box E.129, P.O., St. James 2000.

COLIN GILBERTSON

West Ryde, N.S.W.

Sir,

In the last issue of the A.M.R.M., Ron Goodrick requested information about the Oberon Branch line terminus, perhaps the following will help him.

More information is essential for the modelling of the Oberon terminus; the amount of information given in issue No. 32 of the A.M.R.M. was indeed very little.

The track plan is not quite correct, what appears to be just a cattle siding is actually a loop line with a bend in it; a cattle dock is there.

There is no locomotive depot; it is only a siding. There is a home signal between the cattle siding loop and the main line, and a landmark situated approximately 300 yards down the track towards Tarana, from the signal.

The coal dump is a bin made out of sleepers. It has no front. The sleepers are piled up 4 or 5 high from the ground. It is just a bin with back and two sides.

The goods shed is approx. 20 ft. long with a large door in the front. The back is just a wall; the roof is made of corrugated iron. The photo in the A.M.R.M. issue No. 32 shows a picture of the goods shed. Both sides of the shed are the same, except the side not shown does not have a barrel for drainage water. There is guttering all around the shed.

There is a loading ramp along the goods loop. It extends for about half way along the loop, starting at the goods shed.

The locomotives used on this line are the 45, 48 and 49 class engines. The goods traffic is predominately S, BSV, BCW, CW, K and MLE wagons. The S wagons are for general goods. The BSV's are for sheep, the BCW's and CW's are for cattle, the K's also for general goods and the MLE's for timber and logs.

Since you would like to know what the letters stand for, here are some: S stands for standard, BSV for bogie sheep van, BCW for bogie cattle wagon and CW for cattle wagon. I do not know what K and MLE stand for.

I hope this information has been of benefit.

It is not all that was asked for but it is the best I can do. If you could write to me personally, care of the Editor, I may be able to send more information to him because I was, at one stage, going to model the Oberon branch also.

MICHAEL JENSEN

Katoomba, N.S.W.

S.C.M.R.A. will have a listing of N.S.W.G.R. rolling stock codes available at their stand during the Model Railway Exhibition at Sydney Town Hall in October.—Ed.

Sir,

While reading a new book by the veteran English author and railway artist Hamilton Ellis, "The Pictorial Encyclopaedia of Railways", I was amused by part of the description of a numerous class of 2-4-2 express engines used on the former Paris-Orleans Railway in France.

His description reads in part ". . . the boiler, dome, sandbox and cylinder castings were all of unpainted brass which, in the engine's prime, was kept highly polished."

Now who says there is not a prototype for everything?

F. F. RADDATZ

Melbourne, Vic.

CLUB CAR

Club Secretaries are reminded that space in this column is available free for details of your club.

S.C.M.R.A.

Membership Dues: $4 per year. Joining fee $2.
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Vic.: Jim Wilson, 37 Potter Street, Black Rock, 3193.
S.A.: John Trelease, 7 Milton Avenue, Fullarton Estate, 5063.

The Australian Railway Historical Society

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Meetings:
Canberra: The Griffin Centre, Bunda Street, Canberra City. Third Saturday of each month at 8 p.m.
Sydney: 11th Floor, Railway House, 19 York Street. First Wednesday of each month at 7.30 p.m.
Newcastle: Railway Institute. First Thursday of each month.
Riverina: Wagga Railway Station. Fourth Sunday of each month at 2 p.m.

WOLLONGONG MODEL RAILWAY CLUB. Club Representative: Lyndon Spence, 71A Campbell Street, Wollongong, N.S.W. 2500.

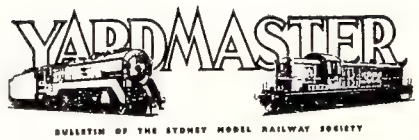
Well, the Wollongong Police Boys' Club Models & Hobbies Exhibition has come and gone for another year. Much hard work by all clubs and groups participating resulted in a successful weekend. The bounding enthusiasm of the organiser, Barry Glover of the Illawarra Live Steamers, rubbed off on most of us and I think I could safely say that all those of the 4,000 people who came to see it, enjoyed themselves. Of interest to railway enthusiasts was the Illawarra Model Railway Association, the Live Steamers and the Rail Transport Museum exhibits.

Our club benefited from the exhibition in two ways. Firstly, without the exhibition hanging over our heads, our exhibition layout would never have been finished in such a short period, and secondly, it brought two inquiries from prospective members about joining us.

I'm pleased to report that our operations ran smoothly, 4 to 5 trains running constantly, except for the odd occasion when a young spectator would get a little too enthusiastic and try to participate in our display. Supplementing our layout was Bodo Schwarz's narrow gauge "Kangaroo Valley Tramway". Bodo spent a lot of time on this display, planted approximately 100 trees and somehow crowded 10 years' modelling experience into three weeks. Eggerbahn and Minitrains comprised his roster and stock.

Now our exhibition layout is finished, it will be housed at club member Dudley Wilkinson's home to make room in the clubhouse for extensions to our permanent layout. Our planned extensions will consist of a large radius (about 50-60 in. radius) loop, in the centre of which will be a small narrow gauge layout. I think there is now enough of us interested in narrow gauge to warrant its inclusion in the club.

Before we go for this issue, we'd like to welcome Derek Bailey to our club. Derek has immigrated to Australia from England and is just the sort of member we need; interested in scenery, Kadees, big power and all that sort of gear.



BULLETIN OF THE SYDNEY MODEL RAILWAY SOCIETY

The annual meeting of the Society was held on Monday, August 12, after two postponements due to the secretary's illness and the closure of the building re Bank Holiday. The main business of the evening appeared to centre around the scope and venue of the forthcoming Xmas party and after considerable discussion it was decided not to expand the style of this gathering and to arrange the usual film and party night as previously. It was stated that this should be made more fraternal especially to be entertaining the members' wives and children who attended and a host for this purpose will preside this coming occasion.

The election of office-bearers saw little change, these being Don Stone elected to vice-president for the O gauge group and Max Mitchell reporter for this column for the same section. Paul Simpson remains as president, Lionel Glendenning vice-president for the HO section and reporter for same, with the office of treasurer staying with Ken Smith and of auditor with Arthur Wheatley.

Prior to the meeting, Arthur produced his 10-car set of the Southern Aurora consist modified from the Tri-ang Commonwealth Railways set and given the necessary all-over silver finish plus alterations to roof vents, etc.

On the O gauge section, as previously reported, work has been proceeding steadily on the replacement of the old centre third rail with new "HO" gauge nickel-silver rail. At the time of writing, Medway from the tunnel mouth on the up side to the overbridge, the Ashcliff branch, Central and Goods yards and Loco was finished and tested. A start has been made on Junction, but the paintwork around station south has not yet been touched. Estimates vary as to the completion date, but the general opinion is that operation will not commence before the new year.

At the moment, only the two or three more enthusiastic members who take an interest in the work are being expected to do the whole job, while the rest watch, or read magazines, or operate the HO layout. Don't worry if you "don't know how", experience is the best teacher, and help is to be had for the asking.

John Alexander has been under the layout soldering wires each night, and judging from the results so far the illuminated diagram at Junction will be a real show-piece when finished. Keep up the good work, John.

Don Stone is back after several months convalescing following a gall bladder operation. Nice to see you again, Don.

I must apologise for the brevity of this report as this is my first attempt at the job and I didn't have much time to prepare notes, having just been elected to this office.

MAX MITCHELL

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MARKLIN HO Layout—extensive collection, 5 locos, etc. Price negotiated, approx. $150. R. M. Woolner, 8 Mansfield Avenue, Caringbah, N.S.W. 2229.

TRI-ANG Super 4 Track. Straight track — various lengths, curves—all radii, a total of 300 pieces. Also 32 electric powered points, left and right hand. $100 or offers. Arthur Hunt, 4 Pettit Avenue, Lakemba, N.S.W. 2195. Phone (02) 759-8851.

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MARKLIN locos, stock, rail, etc., S.A.E. list; Tri-ang TT3 rolling stock, underframes, etc., S.A.E. list; Zeuke & Wegwerth German narrow gauge on TT3 track, S.A.E. list; Fleischmann locos and rolling stock, S.A.E. list; some "N" gauge, S.A.E. list; Ellis, 3 Keiller Street, Moorabbin, Vic. 3189. Phone (03) 95-2692.

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SEPTEMBER 1965 issue Railroad Model Craftsman to complete volume. Ian Weickhardt, 4 Judy Court, Vermont, Vic. Phone 874-4510.

N GAUGE NEWS will be illustrated from the next issue. Keep up with the news of this expanding gauge. Pacific Steam in three varieties, 0-6-0 switcher and Hudson will be available shortly. An RSC 2 virtually a N.S.W. 40 class should be available as you read this, followed by many more diesel types. For "News" and price lists write Austral Modelcraft, 101 Laura Street, Ekibin, Qld. 4121, enclosing 10c for each issue.

HO SUPPLIES complete coverage of all scale items, Shinohara and Peco trackwork, brass locos in stock also full range all makes HOn3 and HOn2½, wood sections, weatherboards, corrugated planking 25c, also everything for N. We trade-in and layby Austral Modelcraft, 101 Laura Street, Ekibin, Qld. 4121. Phone 48-3377.

NEW ENGLISH lathe, suit live steamer. Swing 5 in. in gap, 2½ in. over saddle, 12 in. between centres. Longitudinal power feed. Four-way toolpost, compound slide rest. Motorised $135. 3½ in. Chuck $24. Screwcutting extra $35. Drilling, milling and other attachments available. Ossie; P.O. Box 41, Beecroft, N.S.W. 2119.

HO Brass N.S.W.G.R. B-G 60 Class model locomotive. Unused and in mint condition. $175 (No offers). Warren H. Wormald, c/- The Commercial Banking Co. of Sydney Ltd., Box 42, P.O., Albury, N.S.W. 2640.

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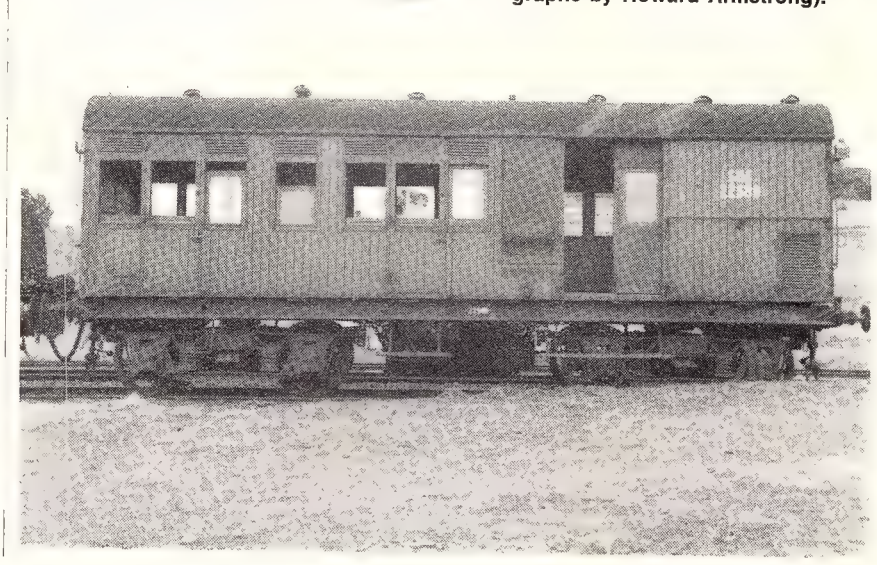
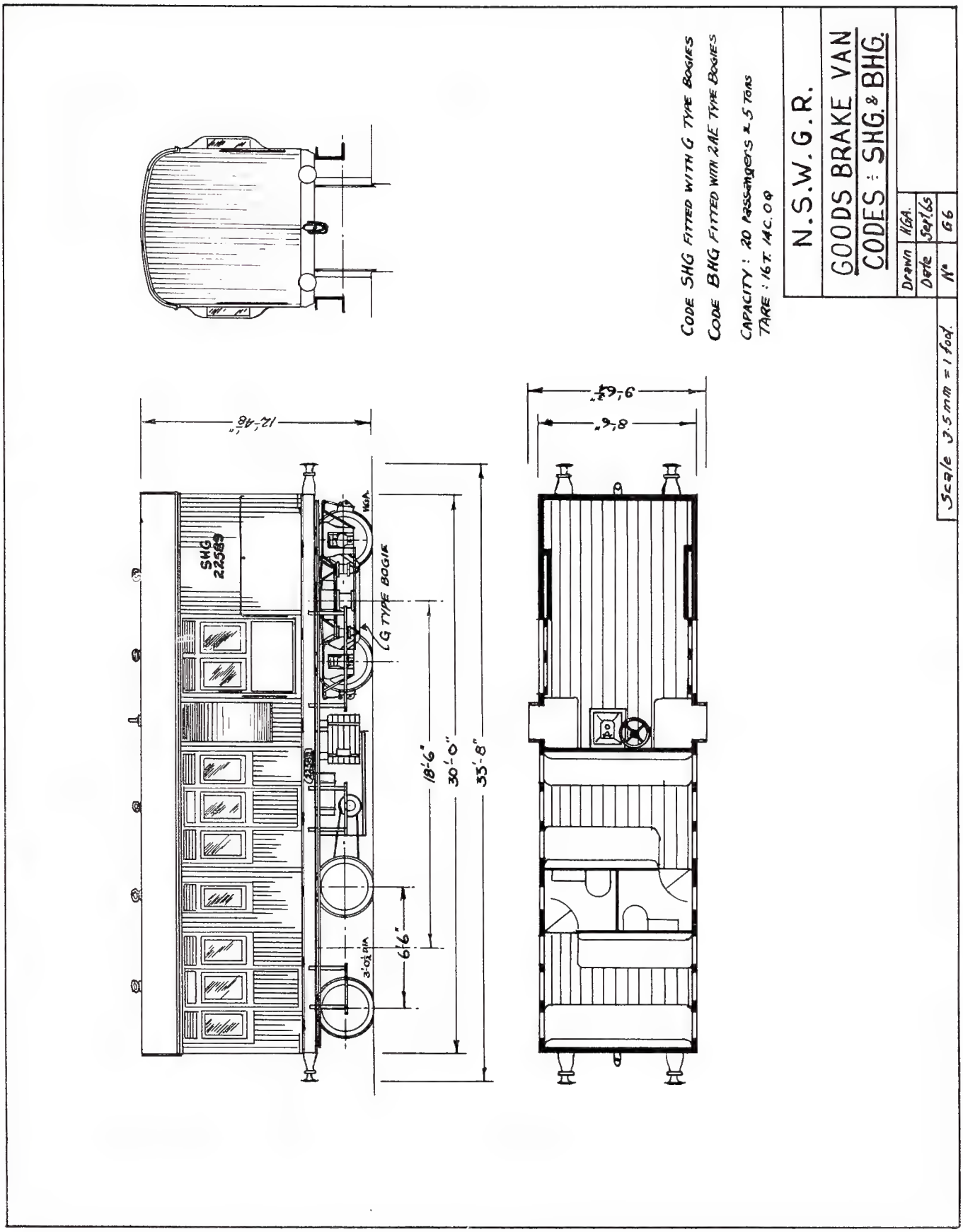
OUR PLAN

Our plan this time is the SHG brakevan which is one of the oldest brakevans still in use on the N.S.W. system. The BHG's were converted from SHG brakevans by fitting 2AE high speed bogies to allow them to be used on express freight trains. (Plan and photographs by Howard Armstrong).




N.S.W.G.R.
GOODS BRAKE VAN
CODES : SHG. & BHG.
Drawn HGA.
Date Sept.65
No 66
Scale 3.5 mm = 1 foot.
CODE SHG FITTED WITH G TYPE BOGIES
CODE BHG FITTED WITH 2AE TYPE BOGIES
CAPACITY : 20 passengers & 5 Tons
TARE : 16T. 14C. 0Q
12'-4 1/8"
9'-6 3/4"
8'-6"
SHG 22589
HGA
G TYPE BOGIE
18'-6"
30'-0"
33'-8"
6'-6"
3'-0 1/2" DIA

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november/december 1968

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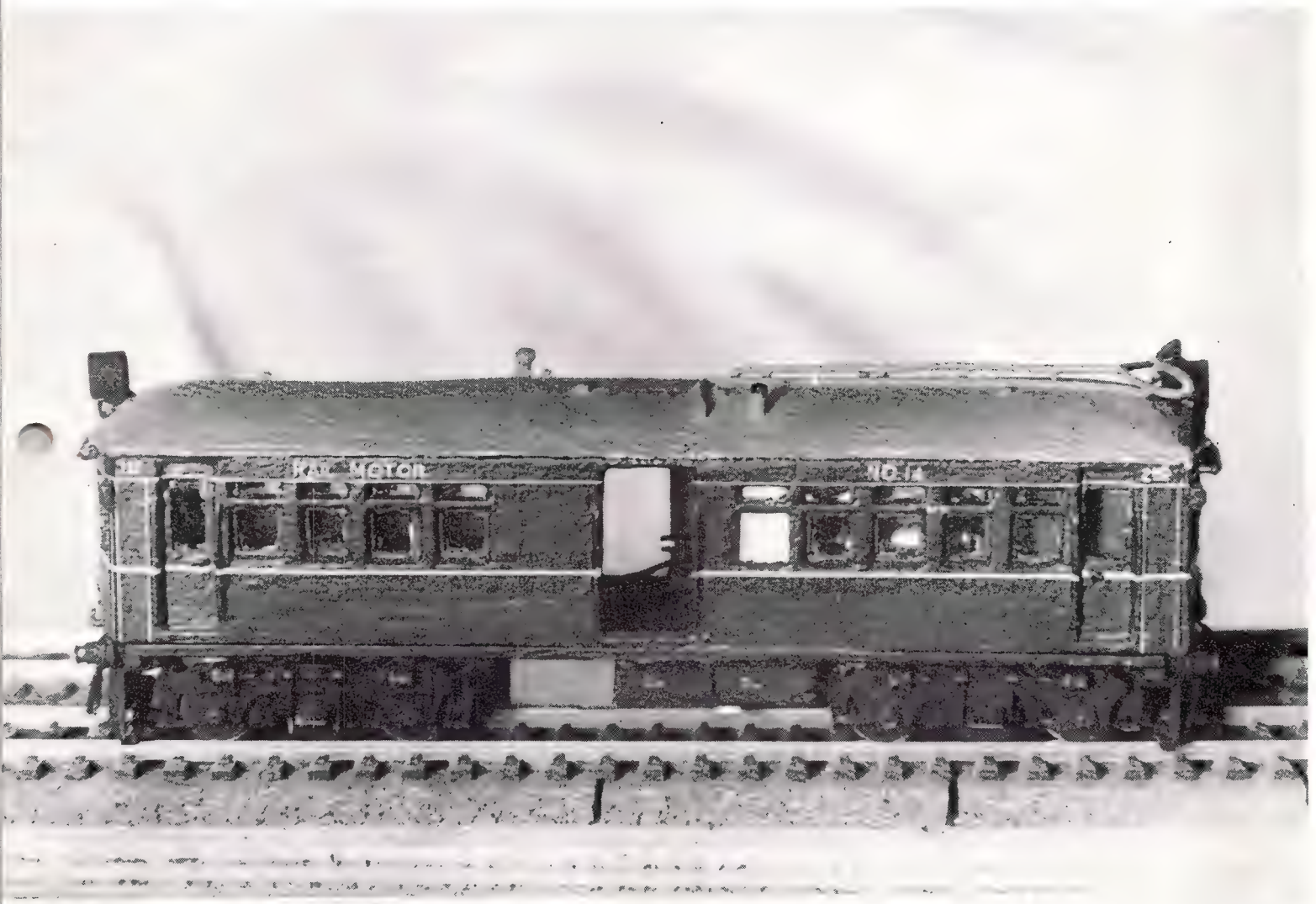
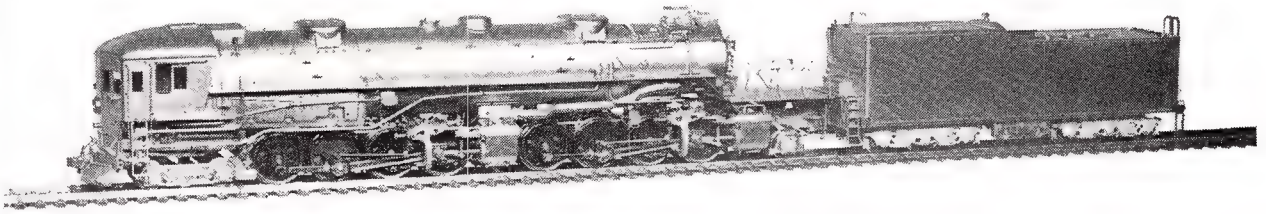


NEW IN HO SCALE! . . .

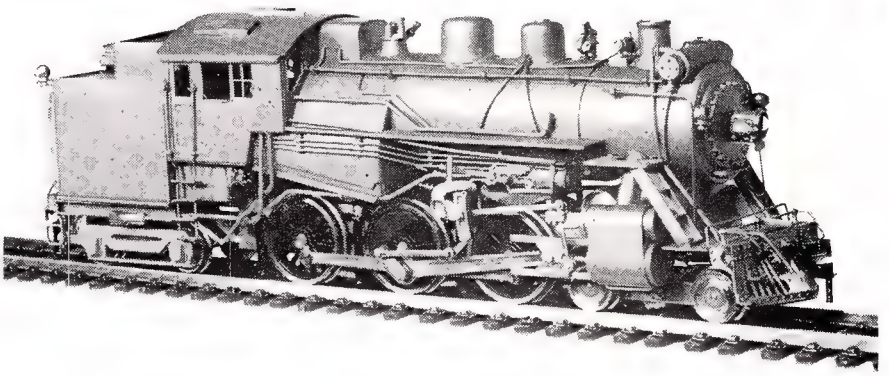
S. P. 4-8-8-2 'AC-12' CAB-AHEAD . . . BY K.T.M. . . .



The winner of the locomotive selection poll conducted by Balboa Scale Models during 1966! A truly unusual design in the field of articulated locomotives, the cab-forward has come to be an all-time classic for the age of steam. Its unique cab in front design, large bulk and massive power combine to form a truly challenging prototype. A total of 26 locomotives were acquired by the Southern Pacific during 1936. The type weighed in excess of 500 tons and provided the Southern Pacific's freight service with 123,400 pounds of tractive effort. The model comes with all external detail. Both 8-coupled engine frames sprung and geared through enclosed, axle hung gear boxes. Honed, lacquered finish. Length, 17½ in. Weight, 2lb. 10 oz. PRICE: **$182.20.**

C.N.J. 4-6-4T:

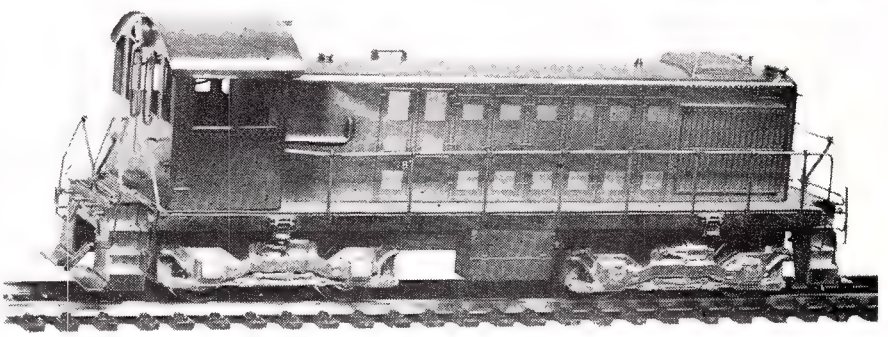
BY KUMATA . . .



Designed for heavy duty suburban service, where a prerequisite of steam service called for a locomotive capable of running with equal ease in either direction, the C.N.J's. Hudson Tanks numbered amongst the finest. Modelled for Red Ball by Kumata, this massive Tank comes with sprung frame and working headlight. Honed, lacquered finish. Length, 6¾ in. Weight, 1lb. PRICE: **$59.05.**

ALCO 'RS-2' DIESEL:

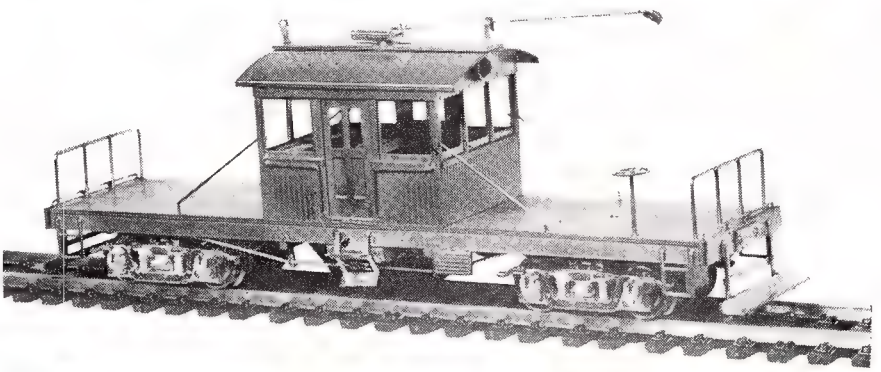
BY KUMATA . . .



The first major development of its kind to receive wide acceptance, Alco's 1000 h.p. Model 'RS-1' was manufactured from 1941 through 1957. Then followed the improved, 1500 h.p. version, 'RS-2'. Neatly finished throughout, Kumata's model comes powered on all drivers, through totally enclosed, axle hung gear boxes. Ideal for the modern yard or branchline. Length, 5¾ in. Weight, 10oz. PRICE: **$41.40.**

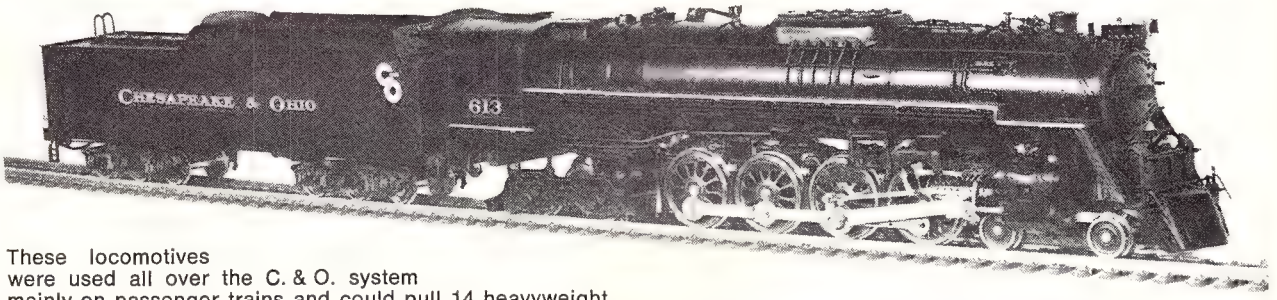
S.N. "OLD MAUDE":

BY KUMATA . . .



A motor flat car, with eight-wheel drive, has long been desired by traction fans. Now Kumata provides it in this interesting model of Sacramento Northern's "Old Maude". The prototype was built by Diamond Match Co., in Chico, in 1904 and saw much use in hauling construction trains. Length, 36ft. 8in. Weight, 21 tons. PRICE: **$29.50.**

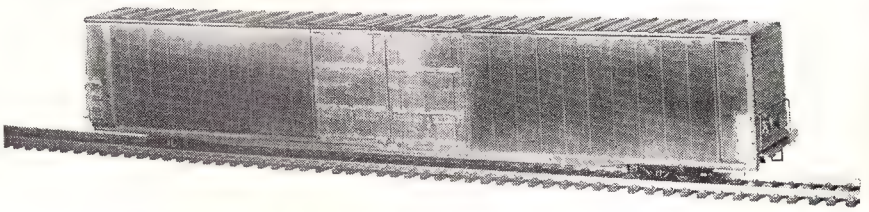
NEW IN HO SCALE! . . .
C. & O. 'J3a' 4-8-4 GREENBRIAR . . . BY OLYMPIA . . .



These locomotives were used all over the C. & O. system mainly on passenger trains and could pull 14 heavyweight cars over the Alleghany and Blue Ridge Ranges. They weighed 397 tons each and were mounted on 74in. drivers. 610-614 had all roller bearing axles and nickel steel boiler shells. 15ft. 8½in. high. 80,805lbs. tractive effort. 112ft. 3in. overall. Faithfully reproducing the latter series, the model comes with all external detail. Fully sprung frame and tender trucks, working radial pilot and coupler, illuminated headlight and detailed back head. Painted and lettered. Weight, 2lb. 2oz. PRICE: **$132.10.**

HI-CUBE BOX CAR: *BY KUMATA . . .*

The Hi-Cube series Box Cars are the largest in common use within the U.S.A. Many varieties of these can be found, having been built by a large number of different car builders and for different purposes. This Car is modelled after a Pullman Standard Car with a single pair of side doors on each side. Comes less trucks. PRICE: **$19.00.**



N. & W. STEEL CABOOSE:
'BY UNITED' . . .

United's Norfolk & Western "C-3" Caboose is an ultra-modern example of welded-side, all-steel construction. Many fans have been patiently waiting for this re-run! Extensively detailed, using Cal-Scale's "AB" Brake Set with Ajax brake staff and fittings. Complete with trucks.

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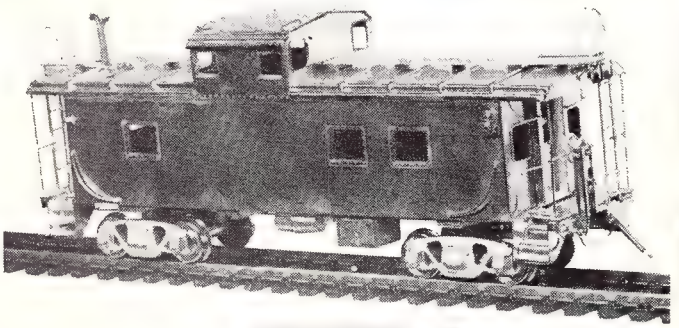
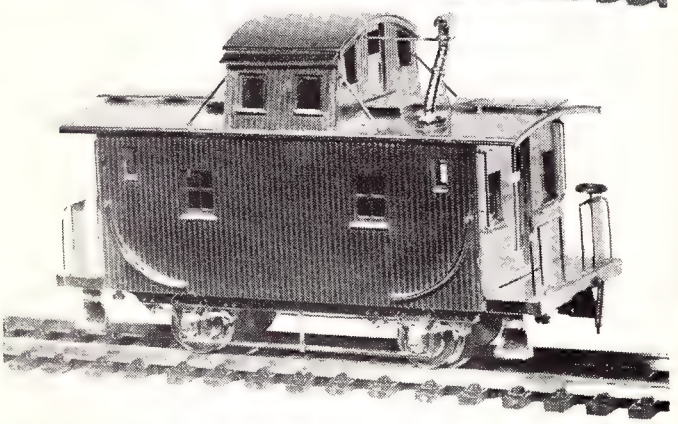


P.R.R. 4-WHEEL CABOOSE:
BY KUMATA . . .

HO'ers have long been envious of the fine brass C. & S. 4-wheel Caboose available to HOn3 fans in the Balboa line. Now Kumata have produced this fine Pennsy. "Bobber" to the same high standards for HO gaugers. PRICE: **$14.25.**



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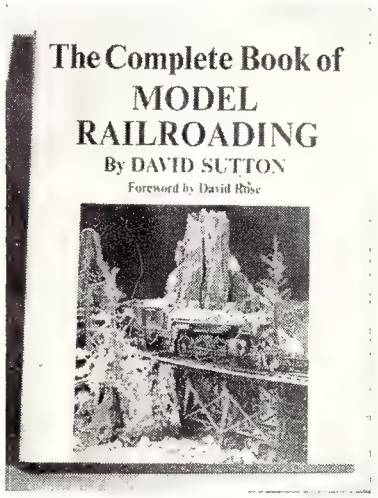

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The Australasian **MODEL RAILROAD** Magazine November/December, 1968 Volume 3 Number 35

The Official Journal of SCMRA in Australasia; incorporating the YARDMASTER, The Bulletin of the Sydney Model Railway Society

ARTICLES

7 **PACIFIC MAPLE MODELS, by Graham Maynard.**
Part 2 of a unique construction method.

8 **PLANNING IN N SCALE, by Paul Van Leuven.**
Adding scenery and extras to your layout.

9 **BRISBANE MODEL RAILWAY WEEK EXHIBITION—NOV., 1968.**

10 **PLEASE HELP—**
How to write articles for publication.

17 **PUFFING BILLY, by Graeme Bentley.**
Model this old-time favourite.

19 **BUILD YOURSELF A MODEL "T", by Russ Siddall.**
Continuing article in diesel construction.

20 **JUNELYN, by Laurie Crosswell.**
A Tasmanian layout.

22 **BUILD YOURSELF A RAILMOTOR, by Graham Kahler.**
A popular unit built from an early plan.

REGULAR FEATURES

6 Editorial.

6 Shop Detective.

12 Armchair Review.

21 Yardmaster.

24 Club Car.

25 Mail Bag.

26 Market Place.

26 On the Cover.

27 Our Plan.

EDITOR J. T. St. Leger Moss
ART DEPARTMENT Howard G. Armstrong, Norman Coughlan, Ivan W. Ive
PRODUCTION DEPARTMENT Peter R. Woolley
COPY DEPARTMENT Fay M. Brown
CIRCULATION & SUBSCRIPTION Terence N. Carpenter
CORRESPONDENCE P.O. Box 204, Kings Cross, N.S.W. 2011

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Editorial

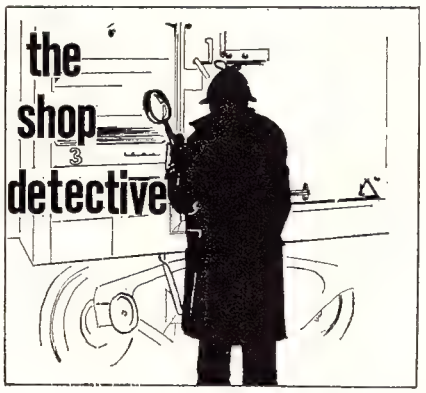
This was not intended to be, but this month's editorial is really under the heading of Mail Bag. The number of letters we have received in the past few weeks about Australian kits has been surprising. It is doubly surprising when this magazine has, for the first time in its long life, a review page of kits and items solely of Australian manufacture.

Those of you who read the fine print at the back of the magazine will notice that we are not responsible for the opinions expressed by contributors. This is especially so of the letters to the editor. Some of the letters published this month have been rather severely edited, both to make them of a length suitable for publication, and even just suitable for publication. That feelings should be running so high on this subject makes us wonder if it is just the lack of interest in the trade which has prompted these letters or if there is something deeper. As a group, Australians are not noted for their tendency to complain, as one correspondent has admitted himself, so it would seem that for every letter we have received there are a good many people who have the same sentiments but who are unwilling to put pen to paper and voice their thoughts.

Of course we are not the only place where modellers can let off steam. There are many hundreds who are members of clubs and associations in this country, and it is for them to use these bodies as a lobby on this matter. After all, it is claimed by most of the larger organisations of this type to have been formed with the intention of furthering the hobby of model railways in this country, for the benefit of all concerned.

This magazine is the most widely distributed Australian Model Railway magazine and as such we trust that members of the trade do read more than their own advertisements and we would certainly like to hear the comments from the other side of the fence.

It is not often that we see much discussion carried on through the correspondence column, but we believe that with the coming holidays many readers will be moved to add their comments to those which have already been made. There is an alternative to writing to us, and that is ask your hobby shop why he is not stocking these locally produced kits. Another alternative is to find out what your associations are doing, and don't just ask them—tell them what you would like them to do to help the local hobby industry.



Recently I called on a friend of many years to chat a bit and pick up a few bits and pieces for my scratch-building efforts. Ray Pearson has been repairing all makes of model trains for as long as I can remember. His collection of vintage trains is a joy to behold. Ray has stocks of spares for Hornby OO 3-rail locos, and can handle repairs to battery-operated toys of all descriptions. Telephone him on 288-3294 about your repair problem or write or call at his home address, 11 Chandler Grove, Burwood, Vic. 3125. (Enter from Webb Street.)

Melbourne Sports Depot is displaying a 'N' scale layout which will give you an idea of what a coffee table project would look like. The 'HO' layout will be operating during the Christmas season to demonstrate their range of locos and rolling stock in this scale. A narrow gauge logging road has been added.

I had a close look at the K T M power bogie whilst there, and feel that this very fine HO item could readily be adapted to suit scratch-built diesel locos, diesel rail cars, Vic. Rly, type parcel vans, trams, interurbans. You'd need to make up and fit your own

(Continued on Page 11)

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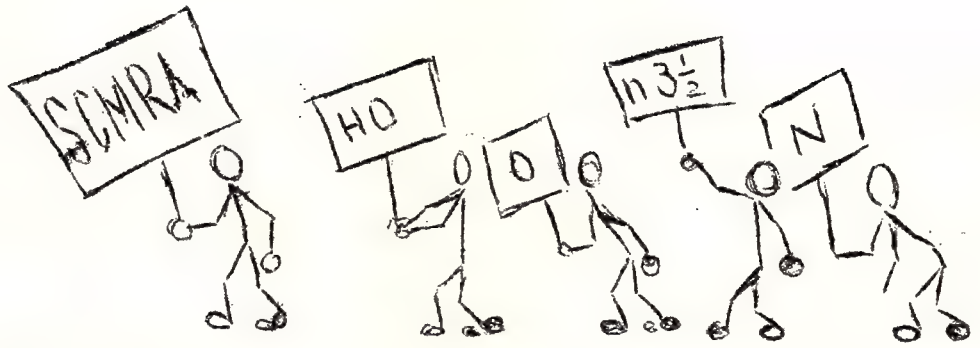
THE BOOSTER — THE LEADER —



ISSUE 7 DECEMBER 1968

BRISBANE MODEL RAILWAY WEEK EXHIBITION.

Recent events in which this Association and the magazine have been involved indicate that modellers throughout Australia can expect greater activities and benefits to all those engaged in this hobby.

As mentioned in previous issues of The Booster, both organisations participated in the Brisbane Exhibition for the first time. For those who travelled from Sydney for the event, it was a very profitable effort as far as waving the flag for SCMRA and AMRM was concerned, and the response by the Queensland members was very encouraging, and particular thanks to Max Chaseling who gave so much of his time and energy before, during and after the exhibition.

As a result of personal representation, we hope to see a few new advertisers in the magazine in the new year. Also expect an increased circulation, as there were many people who claimed they had never heard of the magazine before!

It would appear that the Model Railway Week committee is an active unit in Queensland, and we have their support in promoting the magazine and any other plans the association may have in getting a better deal for modellers throughout Australia.

In the new year the Executive hope to follow up a number of requests for better availability of parts of Athern and Tyco models as these items are apparently like hen's teeth. This is only one of the many items gathered during the exhibition, and we hope that the Association will really be able to do something in this field.

SYDNEY EXHIBITION.

Once again the Eastern Division participated in this event, and it is felt that this year's effort was better than previous ones, with still room for improvement. The new format of the magazine caused considerable comment, and we hope that this new presentation will gain a few new readers. Thanks to Peter Woolley for his effort and ideas with the new cover arrangement. Perhaps you may wonder about the references to the magazine; SCMRA owns SCR Publications, and therefore it is in your interest to know what is going on.

Comparing the two exhibitions this year it would seem that the effort put in by the Brisbane committee is well worth while, and exhibitors particularly have something to learn in the way of presentation of individual layouts in the Sydney exhibition. We will have to improve our own display before the next exhibition.

EXECUTIVE ACTIVITIES:

Apart from routine matters, the following items have been discussed and attended to as required:

SUNSHINE DIV. V.P. Since the transfer of Geoff Gordon to Canberra, he has had to relinquish this position and Max Chaseling has accepted the position. Max lives at 10 Merlin Tce., Kenmore, Brisbane, and would be glad to hear from members in Queensland in the hope of getting the division active again. Max is also the SCMRA representative on the Model Railway Week Committee.

NMRA GAUGES. The Association is going to buy a quantity of available gauges from NMRA for issue to new members. This offer will be made retrospective to those who have joined the Association since its formation.

BUILDING AND OPERATING MODEL RAILWAYS. Whilst in Brisbane, the secretary had an interview with the Signal and Telegraph Engineer for Queensland Railways, and it appears that he was under the impression that the Association was responsible for the production of this book, and consequently they could not give us further information which we need for Data Sheets etc., In case this impression is generally accepted, we must stress that the Executive was not advised that the book was being produced, and that the Association is in no way connected with the book whatever.

DATA SHEETS.As the present executive did not have a budget to work to this financial year, we find that at present we will not be able to issue any sheets until after the new year. However, we are working on the subject material for more sheets. Remember that we would like to hear from you about your opinion of the subject matter of locally written sheets.

SYDNEY MODEL RAILWAY CONFERENCE.

Although the closing date for registration applications was the 1st of December, the committee will still accept any application , So far the response has not been as good as anticipated, and from the amount of planning that has been and is being done, it should be a good weekend. Remember too that the women folk are also welcome as activities have been arranged for them.

As this will be the last opportunity to communicate with you this year, the Executive would like to wish each member and his family a happy Christmas and profitable New Year, and we look forward to greater things for model railway fans in the new year.

PACIFIC MAPLE MODELS

PART 2

As told by **Graham Maynard** to a Staff writer

In the previous issue we discussed the construction of a carriage (or a complete train) up to the stage of undercoating, — don't forget to fill and sand the block before applying the initial coat, sand and clean the fluting (if any) between subsequent coats.

Bogies

1. Attach bogies of your own choice in the correct position, and observe the following precautions;

(a) Keep the bogies on the centre line when viewed from above. (fig.1)

(b) Keep the carriage at the same height both ends. (fig.2)

(c) Keep the carriage horizontal when viewed from the ends. (fig.3)

2. Check the carriages individually for smooth rolling, and rectify any problems now.

NOTE. If modelling a complete train set, look for any non-uniformity between the cars by running them by hand around the track.

Couplings

Fit selected couplings, check for height and clearance between carriages on the sharpest curve.

Fittings

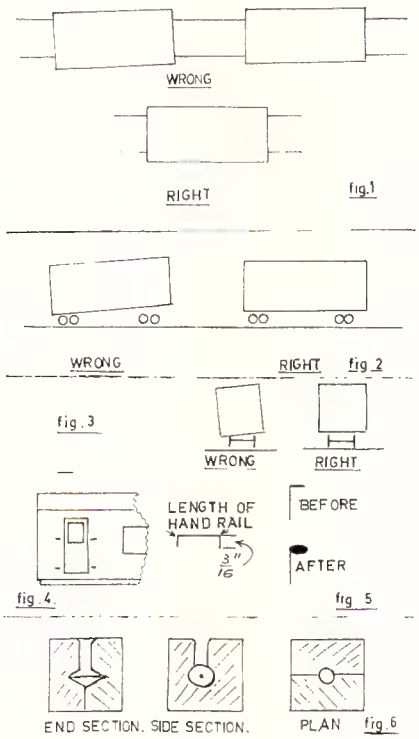
HANDRAILS. These are made from wire, slightly thinner than bell wire. Mark the carriage for position of handrails, then bend and cut wire to shape. (fig.4) Using long nose pliers, and applying pressure equally at each end, force the wire into the sides of the carriage. It would be advisable to practice on a scrap piece of timber to ensure the handrail does not become kinked.

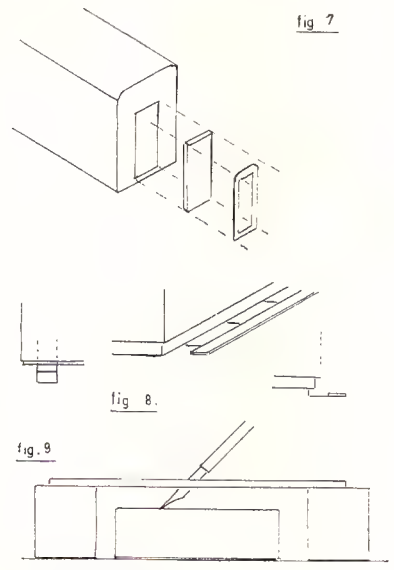
DOORHANDLES. Track spikes are used, with the head of the spike bent at right angles. (fig.5) This is then forced into the block using a pair of long nose pliers. Although the amount of handle protruding is small it is very effective.

CARRIAGE MARKER or LOADING LIGHTS. Small nails or tacks fitted with pliers make a satisfactory light, also matches cut and sanded when glued on to the block and a spot of paint representing the light are equally effective.

ROOF HATCHERS. A good quality cardboard, celluloid or even flat metal pieces cut to shape and glued on in the correct position complete this detail. Cardboard is the easiest to work with in this instance.

AIR VENTS. There are a number of sources for these items; selected nails, (cut down to approx. $\frac{1}{4}$"), commercial products, or even home made vents. These were made with 50-50 solder poured into moulds made from wooden blocks. (fig.6) When the vents are removed from the moulds, they have to be filed and given a trim to the desired shape.





DIAPHRAGMS. Scrap timber pieces, cardboard, or balsa cut to suit the actual type of diaphragm are glued in place. (fig.7) Door details should be added for carriages intended to be end cars in a set. Other details such as springs can be added (using lengths of wire soldered together) if applicable.

UNDERCARRIAGE EQUIPMENT. Centre beams can be cut from balsa or scraps of timber, also battery boxes. Cylinders, compressors, and tanks can be cut from small diameter dowel. Basic details and proportions can be obtained from photographs and diagrams. When fitting these items, check that they do not foul the bogies when rolling around curves, also ensure that items are in the correct distance from the edge of the carriage.

SHUNTERS LADDERS and STEPS. Wire which is thicker than that used for the hand rails should be used for these items. Intermediate steps should be soldered in position. Passenger steps can be made from strips of metal soldered onto pieces of wire fitted into the undercarriage. (fig.8)

ROOF GUTTERING. Once again, a strip of wire with the ends pushed into the block will give a very effective gutter. Narrow window sills and pillars should be treated in a similar manner.

Apply another coat of undercoat to the whole carriage, and when dry, carefully sand any high spots, but be very careful not to damage any of the fittings.

PAINTING. Oil enamel was used for the gloss finish surfaces, and blackboard paint used where flat black finish is required.

Various sizes of water colour brushes were used. Windows were painted a dark grey enamel, but be careful not to apply the paint too thick so that it runs, because it is very difficult to clean any runs. Don't forget that there is usually one or two white or blue windows on each carriage. Apply one coat of enamel of the selected colour for the ends, sides and roof (if applicable). With another selected paint (probably blackboard paint), go over the undercarriage and fittings.

Apply the final coat (after having allowed sufficient time for the previous coat to dry) and be very careful when painting around the windows and doors. If there are fluted sides such as the 'Overland', apply the colour first, then add the silver later. The edges of the silver can be best applied using a 'post office' pen (fig.9) but wipe the nib regularly to ensure there is no 'blotting'. Stripes should be applied in a similar manner. When dry, apply the second coat to the undercarriage. Add lettering and spots for lights as required.

Finish off any silver with a thin coat of clear enamel.

THE END

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PLANNING IN N SCALE

by PAUL VAN LEUVEN

Over the last few editions of the AMRM we have described the construction of a layout from the design stage to the point where we have the scenery on the layout. At least the hills, cuttings and a general effect is there, but we have still got a treeless desert. This is something which so often we see on layouts, and it is so disappointing because trees are very easy to make. In 'N' gauge they are also a very important feature as the smaller scale gives a much higher proportion of country to railway, than the larger scales. The techniques can of course be adapted to modelling in the larger scales and are quite inexpensive. While much of the material used is easily available from the scrap-box other items, such as Lichen can either be obtained at hobby shops, they can also be found by going out into the garden or by looking around on trips in the country.

Ready to use Lichen is marketed by True-Scale and is suitable for HO and O gauge, and a much finer moss is sold by Amren Products, P.O. Box 219, Ingleside, Texas, U.S.A., this moss is similar to the type found in Australian rainforests. The American product is sold in $1 lots under the following trade names:—

Mini-pine; this contains pieces of various sizes, some of which already represent 18ft. high pine trees, other pieces can be used to make larger pine trees.

Mini-plant; same as above but suitable for all types of trees.

Mini-shrub; is a small flowering type of lichen which is suitable for making flowering trees, such as fruit trees and shrubs.

A cheaper method of obtaining lichen is, as we said earlier, to take a trip into the mountain, where one can gather lichen from the rocks and trees in the rain forests. When you have collected your requirements you will have to preserve it. Firstly, wash it in warm water, and then soak it in a solution of 50% Glycerine (obtainable from chemists) 40% warm water, and 10% methylated spirits. Leave the moss to soak overnight, and then carefully place on newspaper to dry. When dry you can colour it with liquid or powder dye. Experiment with this a little, and you will find you can have your trees that much easier, and cheaply.

To represent small trees and shrubs, pick out the best pieces of lichen, and trim them off then glue into holes pierced into the hard shell scenery, using P.V.A. glue. If this causes difficulty, toothpicks can be used to hold them in place. Put the trees in clumps, and remember to make them different heights to get the best effect.

Larger trees, up to about 30 feet high, can be made from ordinary house-hold multi-stranded electric cable. Start by twisting about twelve strands of the wire together from the base up. As you go along, divide the strands into two roughly equal parts: then twist each part separately dividing them again, and so on until you have single strands at the ends. Twist and bend the wire until you have the leafless skeleton of the tree. Give the whole thing a coating of P.V.A. glue or very thick paint so as to fill in the gaps and form a base for the final colouring. It doesn't have to be a perfect job as nature is pretty irregular remember. When the glue or paint is dry, you can paint the tree trunk. The sort of paint you use is up to you. I find that poster paint is satisfactory, it mixes into a very natural colour, usually a brown with a touch of green.

When you are satisfied with the trunks you can start to fit the foliage. Use pieces of scrap lichen, the finer the better, and just press these pieces on to the ends of the strands of wire or branches. No glueing is necessary as the wire itself hooks into the lichen, and holds it in place. One of the trees so constructed can be seen in a photo of my layout in the March/April 1967 AMRM.

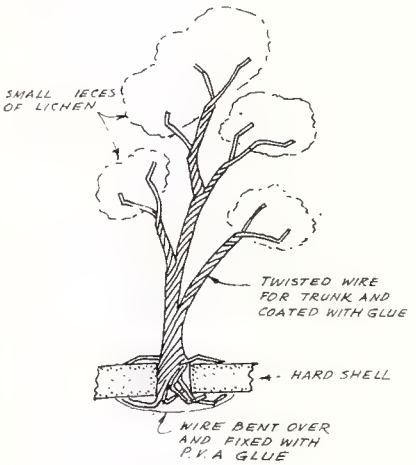

FIG. 1

Fix the trees in holes on the layout with some of the wire strands on the end of the tree-trunk above, as well as below, the scenery shell to simulate the tree roots. Fill in with P.V.A. glue (see fig. 1), and your tree is now firmly planted.

Don't forget to have a few dead trees around. Besides leaving the foliage off they should be painted a dead silver-grey colour. Perhaps even a large black patch on the trunk where it has been burnt.

Those who model Australian prototype often overlook a typical Australian tree: the Grass Tree or 'Black-boy'. This can be made from a piece of woven cord, approximately 1/16in. diameter. In HO gauge, venetian blind cord is ideal, do not use twisted cord rope, as it is not suitable for this purpose. Cut various lengths of this cord, as the trees grow up to 13ft. tall. Start by dyeing the pieces a dark colour as a base for painting. I find ink suitable for this purpose. Push a piece of soft wire up the centre and let it come out ¾ of its length and bend it over, as shown in figure 2, this acts as a stiffener and a means of fastening the bush to the baseboard. What would be the trunk is now covered with black or brown cotton. Wind it up tight for about three quarters of the length. Unravel the top of the cord leaving the centre pieces up-right and bend the outer pieces down. Paint the grassy leaves green, and add colour to suit. For forked trees tie two pieces of different length together when winding the cotton on the trunk.

The best way I have found to make scrub in N scale, comes from using an ordinary draftsmans rubber. You will have noticed these rubbers crumble when used. It is this crumbled rubber which is struck to the layout by first coating the area to be covered with thinned P.V.A. glue, and then the rubber crumbs are sprinkled on. This operation can be repeated after the glue has set to produce an effect of thicker undergrowth. The easiest way to obtain the rubber crumbs, I would suggest, is to hold a piece of suitable rubber against a course rotary emery wheel. By using brown and green rubbers no other colouring is necessary.

Buildings

Just as trees are necessary to complete the illusion of a railway running through

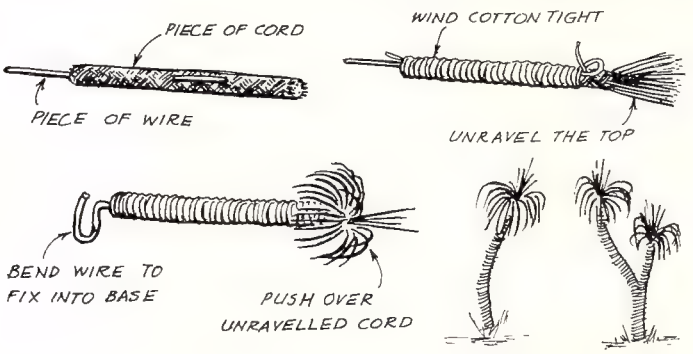

FIG. 2

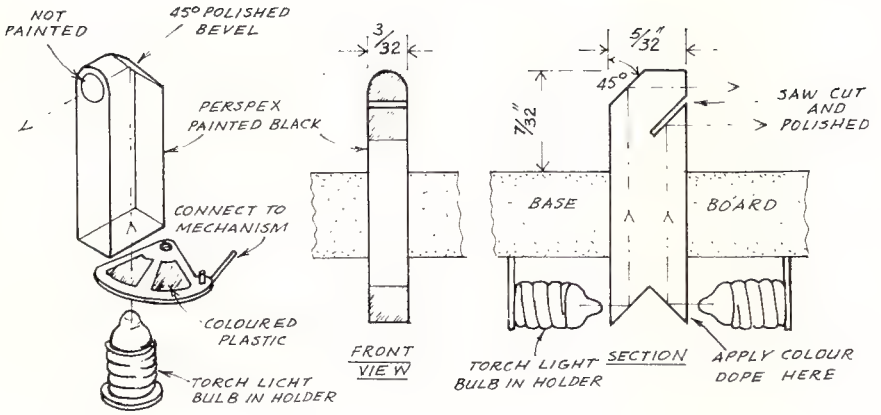

FIG. 3

FIG. 4

countryside, buildings are also an important requirement. N gauge scribed timber is now available from Austral Modelcraft, as well as from the American firm of North-West Timbers. Another much cheaper method of producing planked building siding is to scribe lines with a very hard pencil on Bristol board, and then colour it with dye or water colour to give it a weathered appearance.

Structures such as fence work or fabricated open web steel steelwork can be made as follows:

Take a piece of clear plastic sheet or film, old shirt box tops are good, and place it over a scale drawing of the item to be modelled. Using a sharp scriber, go over the lines which represent the steelwork. Fill in the scribed lines with ink or paint making sure to wipe off the excess. Cut it out and place on your layout. You will be surprised by the overall effect. A fence made in this manner does not look as if it was made from a single sheet, even fabricated sheel towers can be made this way with very good results.

Signals

A very neglected area of trackside modelling is the provision of signals along the line. For this article I will describe the construction of a dwarf signal in plastic, and later I will describe other methods of working with plastic for model railways.

The diagrams 3 and 4 give two methods of construction of this signal. Although not of a specific prototype it is nevertheless suitable and effective on a layout. Figure 3 shows a type which uses one clear bulb and the colour change is effected by using a quadrant with coloured lenses linked to a point motor, or operated by hand. Figure 4 is for a type having two lenses and using two bulbs, which can be either coloured or plain. If you use the clear bulb, the plastic should be coated with coloured dope obtainable from model aircraft suppliers. I favour the use of this method and use the type of bulb with the built-in lens. By using several of these in series we could make up the voltage to suit our supply.

Both types of signal are made from clear perspex, and should be cut out with a fret-saw, filed smooth and sanded with wet and dry paper using water as a lubricant. Final polishing is done by a soft cloth soaked in a paste of talcum powder and kerosine. The saw cut shown in figure 4 creates a second reflector, and should be polished as described above.

Finally the part that is exposed above the baseboard is painted black all over, and before the paint dries, the signalling lens is created by scratching away the paint with a toothpick. The signal can then be fitted to the trackside with P.V.A. glue in holes cut next to the track, and the light fixed beneath the baseboard out of sight. The light travels through the plastic body and reflects against the polished surfaces as indicated by the dashes and arrows in the drawings.

That should keep you all busy over the holidays, and I will be back next issue with more on N gauge modelling.

LAYOUT WIRING MADE SIMPLE

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BRISBANE EXHIBITION

This was the first occasion in nearly six years of publication that the Australasian Model Railroad Magazine was represented at such an event outside Sydney, and the effort put forward in this regard will be of benefit to modellers, hobby shops and this magazine. Some of the outstanding features of the exhibition included the thorough planning and organisation which had obviously taken place over recent months.

Every possible effort was made to assist all the exhibitors in setting up and maintaining tidy surroundings in the City Hall. Amongst the displays from clubs, societies and individuals in and around Brisbane was a very neat HOn2½ layout completely designed and built by Mrs. Ellen Padget of Mt. Gravatt. Mrs. Padget is the first woman to enter a layout which is solely the work of a woman, and this factor caused considerable interest and even concern to some of the men who have been associated with model railways for years.

Scales represented in the exhibition were: O, Sn3½, HO, HOn3½, HOn2½, TT and N, with some layouts being dual gauge. As well as each display being automatically included in a competition for the 'President's Trophy' which was judged by the Commissioner of Railways, Mr. Lee; an architect, Mr. Devanport; and Dr. Suggit. Keen interest was shown in the efforts of one modeller competing against time to finish his control panel before the exhibition finished. In addition to model railways and trams, there were other displays of live steam, boats, A.R.H.S., R.A.A.F., and the Brisbane Tramway Museum. An exhibition guide was handed to each person entering the City Hall, and it was encouraging to note the number of people who referred to the guide as they moved around the displays. To the surprise of the editorial representatives who travelled from Sydney for the occasion, quite a large percentage of women attended the exhibition and showed keen interest in all that was happening. In an effort to ascertain why this situation, which was unusual for those who attend the Sydney exhibition, existed, enquiries were made, and some of the answers were very encouraging; Mrs. Smith of Indooroopilly brought her husband along to get him interested so that she could 'play trains at home', Mrs. Storey of Hill End gave the same reason, Mrs. Evans of Clayfield is keen to have her own layout and came to get ideas for a suitable layout. Most were interested in learing as much as possible so that they could help their sons to build a better layout. Some were just fascinated and couldn't resist spending an hour watching trains. Others came to help the charity which benefited from the exhibition.

Whilst we cannot describe all the layouts and other displays, a few of the

Continued next page

PLEASE HELP

It is the aim of this journal to present the latest information to the widest possible circle of model railway enthusiasts whether they be beginners, experienced modellers or specialists in one of the many branches of the hobby.

Choice of theme is governed by the view that contributions which are too technical mostly belong in more specialised journals. As regards style and presentation contributors to the magazine should constantly bear in mind that they are not addressing themselves to a circle of specialist readers but to a cross-section of the entire modelling fraternity.

The magazine feels itself particularly dedicated to the continuing education of the model railway enthusiast by acting as a liaison between specialists in the various branches of the hobby on the one hand and the large group composed of the general modeller on the other. This latter group is in constant need of continuing information about established practices and advances in railway modelling.

It is felt that liaison with the hobby in other countries requires to be established and maintained. The collaboration of suitable foreign authors is always welcomed by the journal.

As regards the actual mechanics of preparing an article for our pages the following advice may be of help to new authors. We feel that many more of our readers would write for us if the preparation of an article were made simpler for them.

General: A good article may take a basic form. If it discusses a relatively circumscribed theme, it is best arranged like the formal lecture we all remember from our student days. The theme must be broken down into suitable headings with subtitles, use of italics and other aids to study.

Length: This is very variable. The text of an article may be very short especially if it is accompanied by good diagrams. On the other hand an article describing the construction of, say, a locomotive, may of necessity be long due to description of all the minute details of cutting, soldering etc. Such an article may be spread over several issues. This may be irritating to the reader who starts to build it as he is often anxious to complete his model, but it is unfair in a magazine of our size to fill it with one article only to the exclusion of other articles which will appeal to the majority of modellers who do not wish to build such a locomotive.

Technical Terms: These and their abbreviations are often confusing to the beginner and authors should either avoid them or provide a small glossary explaining them to the reader.

Photographs and Sketches: These are essential to almost every article. Photographs are difficult for some authors to obtain. We have a good photographer on our staff and we are only too willing to photograph models for inclusion in our pages if the author will bring or send them to us. General photographs of groups of people, distant views of layouts and prototype railway scenes can usually be successfully produced by the author. If not we are willing to supply help. It is hoped that early in the New Year we will be able to print an article on photographing models which will we hope interest many.

Photographs should be sent as prints, glossy finish, in black and white. Preferably they should be twice the size that they will appear in our pages. E.G.: 4½" wide for one column, 9" wide for two columns and 14" wide for three columns.

These latter measurements are also the widths in which we require sketches and diagrams to be supplied. We reduce them to half size when we prepare our blocks. This makes the lines of the sketches and drawings much neater. But please remember that any lettering will also be reduced in size. So allow for this. Nothing is worse than a sketch in which the wording is too small to read. If in doubt. let us do the lettering; we have a group of excellent draftsmen who will carry this out for us. In fact they will do the whole sketch for you if you feel incompetent. Just send in rough plans with lettering and measurements. A glance through our pages will show you which diagrams have been done by a professional or an amateur hand.

Typing and manuscript: Although a typed article is welcomed by us, contributors should not hesitate to forward handwritten work if it is legible. In both cases double spacing should be used. This latter request is not an idiosyncrasy of editors but allows room for their comments, additions, deletions or alterations.

Finally: Be careful with the spelling of proper names. Authors frequently mis-spell names of people and model railway products. Measurements are best given in prototype feet and inches as the reader can then convert them to the scale which he is using. Do not use colour as we cannot reproduce this at present. If a word or phrase needs to be emphasised by all means underline it but make a note in the margin thus "italics" or "bold".

Brisbane Exhibition

(continued)

more outstanding features of some are worth reporting. Athol Smith's O scale layout was a real crowd gatherer. As well as a large variety of rolling and coaching stock, and locos. of Lionel and Hornby origin, the 'Happy Loco' which was the centre of the advertising for the exhibition could be seen puffing around the layout. A number of operating models also caused considerable comment; the large crane with an electromagnet loading containers to and from an open wagon and table top truck; the signalman moving up and down the steps of the signal box on the arrival of a train to exchange staffs; the punch press and drop hammer in the workshop with smoke drifting from the chimney; the ice works and loading mechanism for loading refrigerator cars. The South Peninsular Model Railway Club's layout depicting British Southern Railway stock throughout was the result of many hours of work which did actually represent the prototype, and for their efforts, the club members won the 'President's Trophy' and shield for the best display in the exhibition. Merv. Padget caused a little disturbance when he ran a 'Ghost Train' which was made up of a number of 4 wheel Airfix wagons running without a loco, and to vary the apparition occasionally, the 'train' was following a loco. about 12 inches away.

The Moreton Model Railway Club's display was turned over to members of the Toowoomba Model Railway Club on the Saturday, and created quite a stir when they made up a train of 68 bogie vehicles, representing 25 United States road names and three different brands, hauled alternatively by 2 doctored Fleischmann locos made up to represent a U.P. gas turbine (16 wheels) and a multiple unit GP20 and F9 locos. The layout is 16' x 6', and the train was running on the outside track, approximately 35' long with 15in. between caboose and loco. Time taken to pick up the slack in the couplings when the loco started to move until the caboose started rolling was almost 4 seconds. It was quite a sight to see. A multiple exhibit by a group of modellers from the Sunshine Model Railway Club indicated an atmosphere of co-operation between members. The combined layout featured HO, HOn3½, and HOn2½ scales with mainly Australian prototype locos., rolling and coaching stock, and a section of dual gauge track work. All track and points on these layouts are hand laid, and represent many hours of fine work. Subsequent issues of this magazine will feature some of the outstanding layouts from the exhibition.

Advertising for the exhibition was well done with press, radio and television coverage before and during the week, and the Lord Mayor of Brisbane, Mr. Clem Jones officially opened the exhibition by starting the 'Happy Loco' on its journey. A total of 10,885 persons attended the exhibition. If any other organisation contemplates running a model railway exhibition on such a grand scale as this, the members of the Model Railway Week committee would be glad to offer advice and ideas which they have proved to be successful.

THE SHOP DETECTIVE

(Continued from Page 6)

particular type of sideframe, but it is a good start.

Saw some useful looking universal joints in the ship section at the Model Dockyard. The smaller sizes should find ready application to loco construction, particularly in powering both bogies of a diesel loco, or in transferring power from a tender-mounted motor.

Telephone poles by Heljan would add realism to your right of way. There are also some standard lamps. Both these items in packets of about twelve.

At this time of writing a new shipment of 'K' loco kits is about to be opened. They'll be available when you read this. Fine lot of books, including some new ones, available and all the best in rail recordings.

These notes are the last I'll be writing this year, and I wish to offer my sincere thanks to the many who have assisted me in their preparation. In purchasing your seasonal gifts I would urge you to support your year-round model shop, and especially the advertisers in this magazine.

The compliments of the season to all my readers and critics, and to the editor and staff of this magazine Happy New Year.

Prowling around Brisbane recently and noticed what could be Australia's largest range of Faller and Fleischmann equipment at Bill Brown's Sports Store. Amongst splashes of red ink could be seen a new edition of "N Gauge News" (10 cents post free) along with Mansard roofing timbers at Ekibin. Later, passing idle moments reading through Hobbycraft's HO and N gauge catalogues, each being 10 cents posted, noticed Kadee Greas-em, a dry lubricant suitable for any rubbing surfaces except electrical components. These catalogues would make buying a lot easier for out of town modellers.

A new hobby shop, with the main aim being to encourage the modelling of Australian Railways, has opened in North Sydney. Named Protype Models, it is located at 67 Walker St. and is managed by Keven Hardacre. As there is no current hobby shop in this area he is keen to have modellers drop in for a chat so that he can gauge the interests of modellers and have their requirements in stock. At the moment he has some Athern and Hobbytown kits in stock with a range of super detailing parts from Cal-Scale, Kemtrom and Tomalco. The stock is small at the moment but is growing all the time.

This shop will be producing a HO scale model of the N.S.W.R. 57 Class 4-8-2 Steam Locomotive in the near future. This will be a cast metal kit similar to the Bowser kits of U.S.A. locomotives. It will have a modified Hobbytown drive mechanism fitted with a flywheel on the drive. All drivers will be powered and also the tender wheels may be powered. The tender, boiler and frame will be solid castings and will give plenty of weight. This promises to be a fine kit.

The Model Railway Exhibition in Sydney certainly showed us lots of things we can look forward to seeing in the coming months in the way of Australian equipment. A N.S.W.R. 57 class was announced by Protomodels—delivery details and price to be announced early next year. Friedmont Models have also announced Goodwin/Alco hood units, both the 1800 h.p. and the 950 h.p. units, for release during next year. These locomotives will be useful companion pieces to the Tonkin Products cab units already available. To haul behind these locos is a wide range of goods wagon kits—now available through Berg's Hobbies and Hobbyco in Sydney. We believe that Bridglands in Adelaide are also stocking Tonkin products.

At last we have heard of a group in Melbourne called Trains Unlimited who are ready to release a line of V. & S.A.R. joint stock "E" type cars—these also will be available early in the New Year. Later it is expected that a locomotive will also be produced as well as "S" and "Z" class passenger cars.

A number of our shop spies in Sydney have hastened to inform us that Searless stock Eheim and Heinzl equipment in that city.

After far too long Hobbyco have received stocks of North-Eastern timber shapes.

MIXED GAUGE

by Spencer Street

Although there has been through standard gauge operation between Perth and Port Pirie and the eastern states for only a month, the big yellow wagons of the W.A.G.R. are being seen in marshalling yards in Sydney and Brisbane, and quite probably in many country centres where interstate goods traffic originates. The size of these wagons is quite startling. To read the dimensions of these vehicles is one thing, but to see them against the biggest the eastern state systems have to offer is another. It is also strange to see a colour other than the usual red or grey on a rail vehicle. The golden yellow which the W.A.G.R. paint them when new seems to fade in a manner which should be quite a challenge to recreate on a model. Don't expect me to try to describe it, just keep your eyes open for the big yellow ones in the interstate trains.

The N.S.W.R. has recently announced a new symbol to be used on the suburban system. It is a stylised "R" in white on a red background. We are told it will first be used on the new construction work for the Eastern Suburbs Railway, and then on the railway stations as an identification sign, necessary as most of the stations will be underground. It is to be hoped that a similarly distinctive symbol will appear on system wide rolling-stock. The dark grey, or is it black, with which the wagons are painted is certainly unlike any colour used by other systems, but surely a symbol as original as those used by the S.A.R. and the V.R. could be found. As a modeller I find it embarrassing being asked, "And what system owns the black ones?"

35mm. TRANSPARENCIES
of West. Aust. Railways—STEAM & DIESEL.
Over 100 of STEAM ENGINES (some long since gone). Over 100 of Rolling Stock, Diesels, Locations, etc. Duplicates 45 cents each (posted), $2.40 for 6 (posted).
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Track, Points, single rail & fitting in O, OO, HO and N gauge.
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ARMCHAIR REVIEW

NSWR class GRC Refrigerator car. Produced by: MRC models. Available from: Bergs Hobbies, Parramatta, NSW.

The GRC class refrigerator car is based on the MRC class car of the NSWR and is an experimental vehicle using gas as the refrigerant rather than ice or mechanical cooling. At the present time there is only one of this class in operation on the system, although it is possible that more will come into operation in the future, but it is likely they will be of different appearance. However, the manufacturer has wisely chosen to produce this model as an adjunct to his already successful model of the MRC and MBC classes; the MRC being another variation of the MRC.

The kit itself is of wood construction, in common with all other kits produced by this organisation, and it goes together easily. The only point being that the vehicle is steel sided and so careful preparation of the sides is required to eliminate the wood grain. When built, and we must comment that the instruction sheet has been improved over earlier ones, the model's scale dimension are correct for 3.5mm. scale.

In common with most other local kits, bogies and couplers are not provided. The bogies fitted to these cars could probably be best represented by an Andrews type truck by Central Valley or perhaps one of the types now being produced by Howard Armstrong in Canberra. This is one of the few faults with this kit. The type of bogie used is not stated, and being such a rare vehicle, it would be difficult for many modellers to see and establish the true type of bogie used.

NSWR class 'BD' open bogie wagon.

More complicated than the other kits from this manufacturer, it is an interesting one to build, and should not present any difficulties in construction. Once again, however, the kit is a wooden model of a steel prototype, and the problem of eliminating the wood grain is presented. A second difficulty is that the prototype car sides are of a ribbed metal, which is represented by thin wood strips. This gives the model a somewhat heavier appearance than it actually should, it also means that care must be taken in the preparation of the surfaces to avoid sanding down and so destroying the detail which makes this vehicle so distinctive.

We found that the door, when built according to the instructions, scales out approximately 18 ins. over-size. This, of course, can be corrected when building the kit if it does offend: to most people this is not an offensive defect, as it would hardly be noticeable when the wagon was painted and lettered. All in all this kit should find a useful place on any layout needing short bogie stock for non-bogie exchange traffic.

TONKIN PRODUCTS, OATLEY, N.S.W.

A wide range of kits are now available from this manufacturer, and whilst we would like to, it is impossible to review them all fully.

This line of kits is of card construction, and as such are priced very much lower than we expect for local kits. We were not familiar with card as a building material for rolling stock and so were wary of its ability to produce a model of any quality. We have been surprised. To do the job properly it is necessary to coat all surfaces of the card with shellac before assembly, and don't forget that this includes the edges where the card has been cut during construction. The shellac coating stiffens the card and also makes it waterproof, and so stops it warping in the humid climate found in many parts of the country. Since building these kits they have been in constant service on a layout and have survived the handling which they have been subject to for some four months without any serious trouble. The worst thing that has happened is that the glue has come unstuck in some places, because we erred on the side of using too much for fear of what might happen to the card.

The first kits produced were four-wheel wagons, designed to fit the Lima four-wheel wagon chassis. This made the models slightly out of scale, 1 ft. 6 in. too long and a mere 6 in. too narrow. Two types are available—an open wagon, NSWR classes K. U. CU and KC; also a wheat hopper, NSWR classes RU and UL. These kits are easily constructed and anyone wishing to try their hand at this method of construction is well advised to buy one of these before attempting the larger bogie open wagon.

Tonkin Products have advertised this wagon as being a model of the Victorian Railways ELX class, the SAR, SGX class, as well as the classes BDL, BDX, CCL, CCX and CSW. It is certainly a model of the NSWR vehicles, but it is only similar to those of the other systems. However, the kits are easily modified to account for the variations and so provide vehicles for modellers of other systems something which they cannot get commercially anyway.

This kit comes with the card construction body and its fabrication is no different to that previously described, although the fitting of the external bracing is a rather tedious job but one which if done properly will result in a good looking model. The underframe is of cast aluminium which, when cleaned of flash looks very well on the completed model. It is advisable to check the length of the frame with the body and also to fit the bogies and couplers before attaching to the body. The couplers and bogies are not provided.

This wagon, although similar in general appearance to the BD class wagon, the Tonkin vehicle is longer, 46 ft. against 35 ft. 6 in. A large number of these wagons have also been converted for operation through bogie exchange plants, and can therefore be seen in trains in all States. The use of card as a material for construction results in a thinner side, and therefore a more prototype appearance essential in an open wagon.

Goodwin-Alco Diesel Cab Unit

A new model from Tonkin Products which was introduced at the Sydney Model Railway Exhibition was an aluminium kit of the NSWR 44 class and the SAR 930 class locomotive. This kit is a body kit only and is designed to use the Lima Netherlands Railways electric catalogue No. 8024 mechanism.

The kit is not a difficult one to build, but neither is it as simple as the rolling-stock kits. The kit comprises several cast pieces, all of which carry considerable flash, and on the kit we received was rather heavily pock-marked by the casting sand—later kits do not have this to such a marked degree. This means that a considerable amount of work has to be done to eliminate this, again not difficult, the aluminium is very easy to file, but necessary to result in a good looking kit. We found that the construction diagram was not clear, and tended to be confusing. The suggestion in the instructions that a trial assembly be carried out, should certainly be heeded. The forming of the top of the nose is something which requires care, but again this is not an impossible task. The curvature of the nose on the model has caused comment: it appears to be too flat, but it would seem that this is because the model is compared, not with the prototype, but what we think the prototype looks like.

The castings have been made with openings for the staff exchangers to suit both the NSWR and the SAR, the redundant openings being filled in with body putty.

The motor and bogies fit into the spaces provided, as they should; all in all, this model is a most important contribution to the Australian market, and although not a "shake the box kit" to modellers who are sick to death of having to design and build everything they want, this kit comes as a welcome relief.

Contributions to this column are welcomed

SENTINAL N gauge points. Left and right hand, 1 ft. radius. Produced by Sentinal Products, Albury, NSW.

Sentinal is not a new manufacturer to the local scene, their 'HO' line of equipment is well known, and these points continue the tradition of high quality track-work, in this case they are probably the best item yet produced. These points are fully compatible with Peco 'N' gauge track range, and wisely they fill a gap in the range of radii offered by the propriety lines ready to run sharp curves and the wide radius points produced by Peco.

The points themselves accept all types of rolling stock wheels currently available in Australia, whilst electrically they are of the insulated frog type with a very fine plastic insert. It is almost impossible to have a locomotive stall on these points. These units have the very ingenious system of locking the blades by using an off centre spring, the same as that used on the manufacturers' line of !HO' points.

The throw bar is plastic with a small hole on either side for the control wires, and although these were not used in the review, it is felt that the wire would eventually cut through. It seems a pity that facilities for the mounting of the Peco point motor under the track are not available. This could be because of patent difficulties, and although it is a very minor point, it is a modification which would make this excellent product that much better.

Available from all hobby shops which stock Sentinal Products. Price $2.35 ea.

NSWR LLV type Louvre Van Kit. Model by P.W.P. Models, supplied by Berg's Hobbies Parramatta. Price $1.80.

This kit is a cast plastic model of a very common NSWR wagon. The LLV van and its variants GLV, GLX, TLV, TLX are widely used for the transportation of valuable and fragile items and when bogie exchanged can be seen on almost any railway system in this country. The kit consists of 2 sides, 2 ends and a floor all cast in plastic and a wooden roof with other small parts supplied for fittings. The material used is clear and seems to be similar to 'Perspex', it is only slightly affected by Methyl-ethly-ketone, which is the best styrene solvent, and the manufacturer recommends Aquadhere, Contact Cement (Pliobond or similar) or Epoxy Cement. I used Pliobond to assemble my kit. The condition of the castings is good with only a few surface blemishes, which can easily be filled. The flash at the edges of the castings must be removed before assembly can commence.

I followed the instructions supplied but made 2 braces of wood to make the assembly easier. The roof supplied with my kit was too high and required cutting down to fit. Measuring the assembled model I found it to be very close to the correct size. The instructions say that no washers are required between the bogies and the body, but I found that Athearn Andrews bogies did not swing freely without a washer. The instructions do not state what bogies should be used, this is no doubt due to the wide variety of bogies the

ARMCHAIR REVIEW

(Continued from previous page)

NSWR use on these wagons. When painting the model it is advisable to test the paint on the inside as some paints may have an undesirable reaction with the plastic used. I was a little disappointed with the instructions supplied with the kit, they were not as useful as I would have expected; the lack of underbody detail (brake gear, etc.) was also noticed. A very good point was the provision for coupler, in this case Kadee (X2F could also be fitted though not mentioned in the instructions), an item not thought of in some kits. Even the complaints I have made are only minor and this kit is a good model useful to modellers who model the NSWR or any Australian railway system.

CONVERSION

by R. W. Holden

We received this poem from the well known South Australian modeller R. W. Holden, who hastens to tell us that the modelling described has never been done by him and therefore he cannot recommend the techniques personally.

For those of us who are not fully conversant with the terms used, a glossary has also been supplied:-

Prarie: 2-6-2 Big Boy: 4-8-8-4
Super Mountain: 4-10-2 Mikado: 2-8-2

Armed with this information, we can only say, get out your chequebooks and start converting.

I thought that I would have a go
And make a little 2-4-0.
Conversion is (I think) the term,
So simple — I've been told — to learn.

A borrowed Prairie soon was stripped,
Its parts my 2-4-0 equipped;
But I was at a loss to see
What use an 0-2-2 could be.

So after many hours of thought
I then a U.P. 'Big Boy' bought,
And with a cunning plan in view
Next sawed its boiler clean in two.

Soon from its forward part there came
With some adaption to the frame —
A new conversion built by me,
A Super-Mountain, great to see.

But drive a 'Big Boy' cut in half,
You find your friends will tend to laugh;
So from my best Mikado stuck
A smokebox and its leading truck.

Then with a skill much under-rated
Free-lanced an articulated:
Made with a small 0-4-0 tank
One of the 2-8-8-2 rank!

Ah, ah — you ask — where did you get
Those extra wheels now in that set?
Well, if you really have to know,
I pinched them from a 2-4-0.

SYDNEY MODEL RAILWAY CONFERENCE

SMRC 1969

The Australasian Model Railroad Magazine and the Model Railway Clubs of N.S.W. invite all railway modellers to a Model Railway Conference in Sydney during Easter 1969.

The programme will include:—

Competitions
Modelling Demonstrations
Club Visits
Rail Tour
Dinner
Trade Displays
and
Special Features for the Ladies

COST: $12 per person for Adults
$10 for full time Students

Hotel accommodation available at extra cost.

•

For further details please send SAE to:—

Model Railway Conference Bookings
P.O. Box 107,
LAKEMBA, N.S.W. 2195.

When writing please indicate your accommodation requirements if any.

WAS THERE EVER ANYTHING AS GOOD AS A

Rivarossi

12V. D.C.
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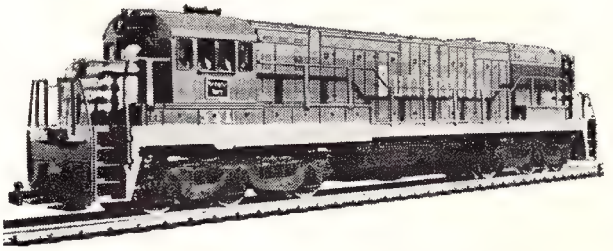
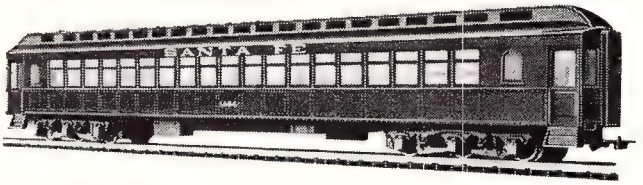
LOCOMOTIVE, COACH, GOODS VEHICLE?

Not unless it was another "Rivarossi" one! They run so beautifully; they're so true to the prototype; they need so little attention once run in; so simply nobody goes past a Rivarossi — except when looking for a different prototype.

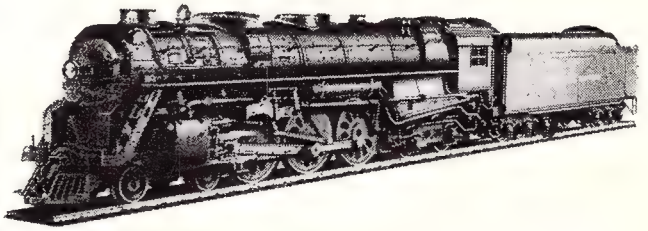
Take this beautiful model on the right No. **1812** of the Burlington U25C 12-wheel diesel with both bogies powered at **$25.95.** The detail is fabulous, the running perfect and so like the prototype. **$25.95.** If you'd prefer another road No. **1813** Pennsylvania or No. **1814** Northern Pacific are also available.

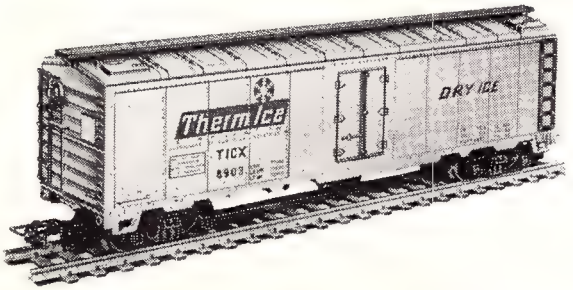




At the left is one of the five Sante Fe Standard Coaches, full scale length internally fitted on free-running six-wheel bogies. The one illustrated is No. **2743** Day Coach. The others are No. **2716** Combine, No. **2717** Pullman, No. **2718** Cafe-Observation (end platform) and No. **2732** Dining Car (all 11½in. long). All at $5.95 except No. **2718** at $6:50. These same cars are made in Pennsylvania and are also internally lighted, prices being $1 each higher. However, No. 82757 the Pennsylvania Day Coach is a special run and once current stock is exhausted — no more.

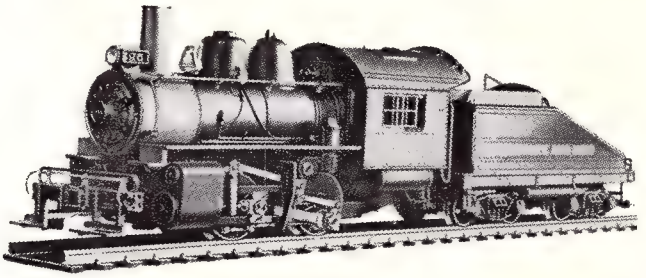
The New York Central Hudson No. **1252** with 12-wheel tender is 13½in. long, is pictured on the right. Price **$45.00.** This loco vies in popularity with the Indiana Harbor Belt 0-8-0 Switcher with 8-wheel tender, length 11in. No. **1224, $27.95** and the Nickel Plate Road "Berkshire" 2-8-4 with 12-wheel tender, 14in. long, No. **1244** at $47.50. All Rivarossi steam outline locos are in constant demand, but these three currently are those that are the "mostest", in the bigger locos.





The Goods Rolling Stock range is not extensive, but the free-rolling, well detailed vehicles enjoy a great popularity with modellers. At left is illustrated a Thermice Refrigerator car on bogies made up from Kit No. 12300. Price $2.75. In ready-to-roll, the Refrigerator Car No. 2303 Rath is at $3.95. Box Cars, Flats, Hoppers, Cabooses, etc., are available in kits and Ready-to-roll.

Of all "Rivarossi" Steam Outline Locos this fussy little maid of all work, 0-4-0 with bogie slope back tender, B&O, 7½in. long, Indian red cab roof, otherwise black, is used the "mostest". Not a big loco but as a yard switcher or on a branch line, on the hi-iron, or heading a passenger or goods train is all one to No. 1225 Ready-to-roll $15.95 or No. 11263 Full Kit $13.95.



For fuller descriptions, copiously illustrated and with November, 1968 Australian price list, ask your dealer for "Rivarossi News", No. 3. Price 5c.

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MASASCO

IN THE HO/OO SCENIC WORLD

SUCH WONDERFUL THINGS TO USE AND TO BUILD

If we started out to tell you in detail of the Wonderful Things it would simply fill the whole of this issue of A.M.R.M., so we content ourselves with just a few.

SUPERQUICK: Illustrated A6 Signal Cabin & Hut Kit, 95c; A7 Run-in type Goods Shed Kit, 75c; A8 Water Tank on Stand & Hut Kit, 75c; A9 Two Double-storey Semi-detached Flats Kit, 75c. But seek out the range of 23 kits, all to suit your railway. A10 Large Terminal Building and Concourse Kit, $1.85 is the highest priced, most are only 75c.

KIBRI: What a fabulous range of Plastic Kits with self-coloured parts and fitting together without strife. Houses, railway structures, tall buildings (like No. 8210 7-storey Office Block at $4.75) and interesting industries like the oil industry complex, not so adequately illustrated here, but enough to show the main kits; No. 9901 Oil Depot, $2.50; 9902 Drum Filling Station, $2.65; 9904 Single Large Oil Tank Installation, $2.50; 9906 Double Oil Tank Installation, $2.65; 9908 Tank Car Filling Pipes Installation, $1.25; 9386 Set of 32 Oil Drums (Shell or Esso), 50c. Then you can go on to trees, flocks and building papers. Buildings contain both modern and period styles.

ATLAS: Recently to hand, Atlas HO/OO Kits: 704 Signal Cabin, $2.45; 706 Passenger Station (U.S.A. style), $4.15; 750 Lumber Yard, $4.15; 757 Saw Mill, $4.95; 760 Roadhouse, $4.95; 775 Set of the 12 best Telephone Poles we've ever seen (best for country or railside), $1.15.

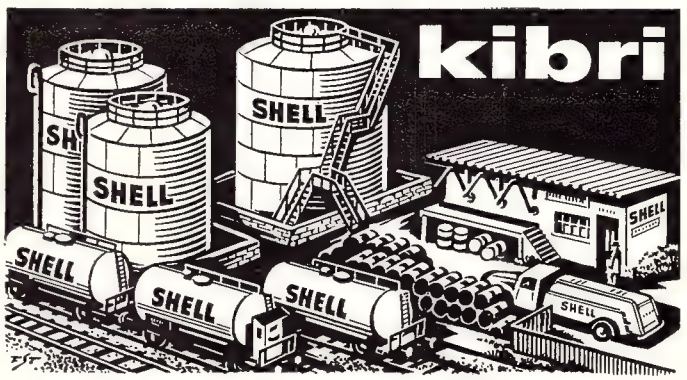
BUSCH: Beaut-iff-ul trees and shrubs in many sizes and styles (none like them!) and No. 7100 packet of various coloured lichen pieces (ready to use) at 40c; No. 7190 Presentation pack of various scenicing materials, $2.65; No. 7222 30in. x 40in. Grass Mat, mid-green with flowers and four other types (made for railway scenery), $2.15 (use them instead of grass flock and paper mache coverings) and real electric lamps, scale size. What a range!

BELLONA: Have you seen the new textured rock face 16in. x 10in. = 85c? Ideal for rocky hillsides, cuttings in rock.

BRITAIN'S TREE KITS: Quite a range at 55c and $1.15, depending on tree size.

MERTEN: The fabulous range of little people, all ready-to-use and in action poses and Aussie-like clothing, $1.25 per set. Let them bring the streets of your towns and your railway to life!

PECO for backgrounds; **BILTEEZI** for backgrounds and economy kits (ask any old hand—they'll tell you, they're most useful—new stocks coming to hand); **JASCO** for posters; **GEM** for yard crane kits; **MAC** for ladders and telephone poles (town type); **MISK** for ready-to-use farm animals and replaceable globe street lamps; **RIVAROSSI** for tramways and railway electric turntables; **SCENIMAT** for metal and wood flour flocks and earth surfacings AND trees; **SENTINEL** for concrete post country fencing (and wire) and for August-shorn merinos; **TANNEN** for pine trees and **VOLLMER** for gasworks. Enough to make your mouth water and to count the cash in the exchequer!



SUPERQUICK MODEL KITS

A6

A7

A8

A9

SUPERQUICK KITS now offer you a range of 21 different buildings accurately scaled, fully coloured and cut out ready for assembly. Making them up is a fascinating hobby in itself, but if you are planning a OO railway layout you cannot do better than start with one of the many SUPERQUICK models.

The buildings, although in many cases architecturally different, have about them the family likeness which does much to capture that "real life" look.

You will find them quite simple to make up, surprisingly strong and rigid, free from any tendency to warp, and most reasonably priced.

Illustrated 20-page Scenic Division Price List and Catalogue called "MASASCO" Booklet No. 160. 3rd Edition lists every line we have in stock, mostly giving sizes, and available from dealers everywhere. Price 5 cents. Get it for much fuller details of these beautiful scenic items. N.B.: Many lines in it suitable also for N Gauge.

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ATLAS N GAUGE

PRICE LIST

NOVEMBER, 1968

0-8-0 Steam Locomotive with 8-wheel tender, 135mm long $29.95
2111 Santa Fe
2112 Indiana Harbor Belt

E8 Diesel Electric Loco, 6-wheel bogies, 132mm long ... $19.95
2101 Santa Fe
2102 B&O
2103 Pennsylvania

Fairbanks Morse Diesel Electric Loco BO+CO, 6-wheel rear bogie, powered 106mm long $17.50
2121 Santa Fe
2122 Union Pacific
2124 Pennyslvania*
2125 Southern Pacific

Fairbanks Morse D.E. 106mm long Dummy Units $7.50
2131 Santa Fe
2134 Pennsylvania
2135 Southern Pacific

RSC-2 Alco Diesel Electric Loco 6-wheel bogies, 113mm long $21.00
(Same as N.S.W.G.R. 40 Class)
2151 Union Pacific*
2152 Monon*
2153 Erie Lackawanna*
2154 New York Central*
2155 S.P.* NYA

U.S.R.A. Pacific 4-6-2 Locomotive with 8-wheel tender
2116 Santa Fe NYA
2117 Great Trunk Western NYA
2118 A.C.L. NYA

G.P. — 40 Diesel Locomotive
2171 Santa Fe NYA
2172 A.C.L. NYA
2173 Burlington NYA
2174 Penn-Central NYA
2175 Southern Pacific NYA

Passenger Cars, Flush-sided, with interior lighting and fittings 85ft.
2651 Pennsylvania Pullman* **$6.50**
2652 Pennsylvania Baggage* **$6.50**
2654 Pennsylvania Tail Car* **$6.50**

Standard Passenger Cars, full scale length 155mm, clerestory roofs, 6-wheel bogies
2601 Santa Fe Pullman **$4.25**
2602 Santa Fe Combine ... **$4.25**
2603 Santa Fe Diner **$4.25**
2604 Santa Fe Observation Car **$4.75**
2611 B&O Pullman **$4.25**
2612 B&O Combine **$4.25**
2613 B&O Diner **$4.25**
2614 B&O Observation Car **$4.75**
2621 Pennsy. Pullman* **$4.25**
2622 Pennsy. Combine* **$4.25**
2623 Pennsy. Diner* **$4.25**
2624 Pennsy. Observation* **$4.75**

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2201 Florida East Coast
2202 Pennsylvania*
2203 Santa Fe
2204 Great Northern*
2205 Western Maryland
2206 State of Maine*

Refrigerator Cars, full underbody detail, 83mm long $2.65
2221 K.O. & G.
2222 National Dairy
2223 Thermice
2224 Blatz Beer*

Hopper Cars, 4-bin, 70mm long $2.65
2241 SOO line
2242 Pennsylvania*
2443 B&M*
2244 Peabody
2245 Burlington*

Cattle (Stock) Cars, 83mm long $2.65
2252 New York Central
2253 Santa Fe
2254 C&NW*

Gondolas, 83mm long $2.35
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2232 Reading*
2233 Monon*
2234 Cotton Belt

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2281 Southern Pacific

3-Dome Petroleum Tank Cars, 74mm long $3.25
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2292 Texaco
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Jumbo Tank Cars, 135mm long $3.95
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2347 Suburban Gas*
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Double Door Machinery Cars, full underbody detail, 83mm long $3.35
2286 Pennsylvania*
2287 Illinois Central*
2288 T.P. & W.*

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2881 2-stall Engine Shed and Workshop, L-shaped, with forge, etc. 7x6x2½in. **$5.25**
2882 Run-in Factory with tall brick chimney 8x6x2¼, chimney 5½in. **$4.50**
2883 Saw Mill — tall with sawdust extractor 6x4x5in. **$4.50**

NYA — Not yet available.

* New since July.

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and our part-time helpers

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FULL OF GOOD TRAINS THAT NEVER DERAIL

—Bill Gardner

PUFFING BILLY

by GRAEME BENTLEY

Over the weekend of October 5 and 6 the Victorian Railways held an exhibition at Spencer St. Station to mark the 50th anniversary of the introduction of electric trains in Victoria. As part of the exhibition the Puffing Billy Preservation Society was asked to organise a suitable display. It was decided that a feature of the stand would be an operating layout, with "Puffing Billy" as the prototype. The layout and train were built by various members, and as cost and time were important considerations, I think readers may be interested as to how we did the job; it may cause some of the more exacting modellers to shudder at the way we did some things, but the display was seen by over 10,000 people, and to most of them, our train looked ".... just like Puffing Billy".

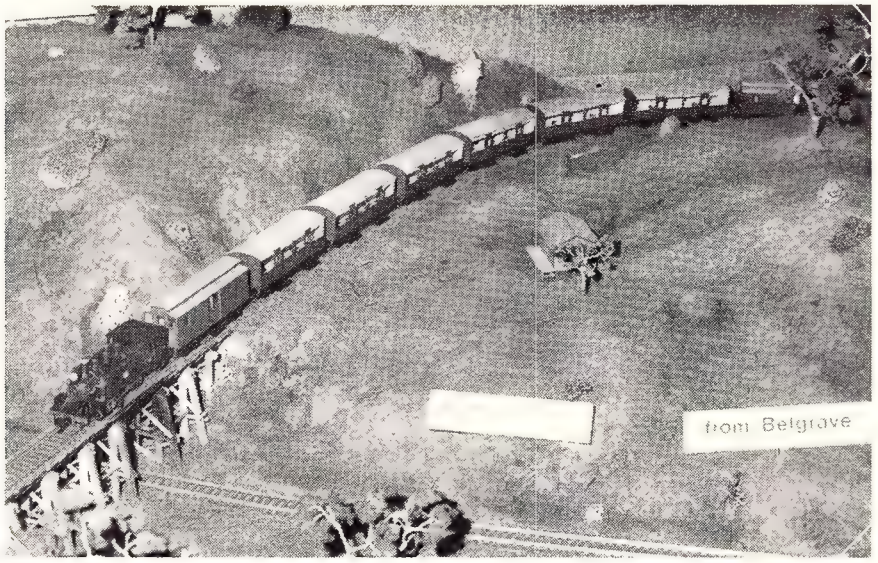
The loco used was a Baldwin 0-6-0 tank engine, by Tenshodo, in HO. From normal viewing angles, the lack of pony trucks and outside frames was barely noticable to the casual observer. However, the super-structure was superdetailed, with an extended pilot, tool box, lifting jacks, a load of coal, number plates, various handrails, and repainted.

The rolling stock consisted of 6 NBH excursion cars, and 2 NC vans. These were roughly to S scale, as this size looked proportionately correct behind the loco. The ends and sides of the NBH's were cut and scribed en mass from 30thou. styrene sheet. The solebars were made integrally with the sides. Assembly also used "mass production" techniques. One person glued a side and end together, the parts being held square by a simple jig (the corner of a box will suffice), while the other person assembled the two halves. The floors were cut to fit inside the sides, being made from $\frac{1}{8}$in. balsa, which provided greater support for the 3/16in. x $\frac{1}{2}$in. bolts which acted as bogie king pins. The seats were constructed out of a piece of 10thou. styrene, and glued to the floors. Next, the top half of the doors, the central uprights and the top plates were cut from styrene and glued to the bodies then pieces of 1/32in. dia. wire was recessed and glued to the sides to form the guard rails. Grab rails made from small staples, were also added at this stage, being inserted and glued in small holes melted in the plastic.

The floors were now glued in, with the bottom of them level with the tops of the solebars. This enabled the bogies to be mounted almost between the solebars, giving the correct carriage height above the rails with the bogies used, and also improving the narrow gauge effect. The interior was then painted, and the cardboard roof added (cardboard was used in order to get a smooth, even curve). Running boards were cut from 10 thou. styrene, and glued to staple hangers, fixed in a similar way to the grab rails. Ventilators were then put on the roofs. These were pin heads glued up-side down to small squares of styrene. The carriages were then painted externally and bolted to their bogies (a blob of glue on the bolt thread prevents the nuts from coming loose). The final touch was added by gluing on the blinds, which were made from rolled green cloth, tied with black thread.

The bogies used were Tri-ang, with needle bearings, which proved to be very free running (the couplers closed up on the slight down grade). The side detail (except axle boxes) was filed off, and mock Fox truck sides added.

The two vans were made in a similar fashion. The main constructional differences being the three piece sides, the central door section being glued behind the other pieces. We also tried recessed solebars which looked better than the flush ones on the NBH's. The roof, also in three pieces because of the clestory, was made from styrene, however, it tended to sag between the supports and did not want to curve easily. We also had some trouble making the celluloid windows stay in place, no glue wanted to stick to the celluloid. Finally, the windows were secured by cementing styrene clips over the celluloid to the



inside of the van.

It is interesting to note the diversity of the actual vans. Some have wooden sides, while others are metal sheathed. Also, some have full length running boards and hand rails, while others only have short running boards and no hand rails. The two modelled, were metal sheathed (to avoid scribbing), one with each type of running board. Final details added were tail discs (both ends, just in case), and the special bent door handles, these again being made from staples.

The colour scheme was silver roofs, gloss red bodies, black under frames, and graphite gray on the running boards. Quite unintentionally, another variation was added, when the NBH's and the NC's were painted with paint from different cans; the two reds being from different batches, were slightly different in colour, which was just noticeable on the cars.

The basic layout was a figure eight with a trestle bridge (thanks to Peter's Ice cream) across the centre. The track was Peco flexitrack laid on a cane-ite sub-base. This was a great credit to the track-layers; all rail joints were bonded. We also put slight super-elevation on the curves, and very smooth gradients. All these things added up to give reliable running. The base board was masonite, with scenery and track built up from it. The basic scenery was carpet under-felt laid over boxes and crumpled newspaper. This surface gives a very good grass effect when lightly sprayed with various coloured greens. The surface can also be easily tufted to form small bushes. To this ground were added various bits of lichen, trees, the scout hut and some non-scale bill-boards advertising the train.

To keep out those exhibition gremlins, the tiny fingers, pieces of perspex about 4ft. x 18ins. were screwed along the sides of the base board.

As I said at the beginning we were pressed for time and like all modellers we did not have much money, so although a modeller at home may find better ways of modelling Puffing Billy our effort stood up well to the scrutiny of thousands of pairs of eyes, and very few noticed the faults which are obvious to keen modellers and railfans.

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BUILD YOURSELF A MODEL 'T'

by Russ Siddall

CONTINUING ARTICLE IN SERIES

At the end of the article in the last edition you will recall that the motor may have been sitting a little high and the body would not sit on the chassis properly. By now you will have had time to do the job properly, and everything should fit without any shorting. Don't take the easy way out and use a piece of insulation tape; it will fail at some crucial moment; it is better to take a little time and ensure that it is insulated forever from the start.

Now on to the cab roof. Measure *your model* — not the plan — to get the length of each part, take the overhang measurement from the plan, then lay it out in flat metal. I used nickle-silver again. Cut to shape, and then bend up in the vise to approximately the correct angles: the last bit will have to be done by the 'fit and try' method. If its not a perfect fit, ease the bend slightly (in the vise!), and try again.

When the fit is satisfactory, solder in place from the inside. Now cut two small squares of metal and solder them behind the openings in the cab sides. Use a card spacer to get them parallel with the side. This completes the cab except for the interior detail, which can wait until everything else has been done.

For the ends, solder two thicknesses of metal together. Lay out the end from the plan. Cut out the ends with your jewellers saw, then cut out the space in the centre (shown shaded in the diagram) and make two cuts to permit the tabs to be folded back. Clean up with a file, unsolder the two pieces, and clean off any excess solder. Now scribe the vertical lines each side to represent the joins in the metal. Bend the three tabs back. The centre one is bent 90°, and the other two 45°. Bend the part which comes below the steps back at a 30° angle. Fit the ends in place on the body. If they look OK, you are ready to solder them in place, but first make a cut near the top left corner, and bend back a small section to represent the space left for the electrical connections: there is one of these at both ends.

Take a flat file and file the tabs until they are all the same height from the front face of the end. Then set one end in place on the body, that is upside down. and tack solder from the back. Then do the same at the other end.

The next job is to make the steps. I did them all at once by soldering four pieces together and sawing them. Lay out the shape as follows: the step side is the same as the side which shows on the front view of the plan. The rest of it or the back is taken off the side view. When you have separated the four pieces, bend the sides at right-angles to the back — don't forget there are two sides and they will have to be bent in opposite directions.

If your measurements have been correct, you will be able to butt the back up to the end, against the tab, and solder into place. When all the steps are installed, measure the distance between the backs of the steps at each end, and cut out two pieces of metal the same height as the steps, to form the end back-plates. File to size, and solder in place, flush on the tabs. You should have ends which look pretty much like those on the prototype.

Treads on the steps come next, and I made these from thicker metal to represent wooden treads. The bottom one is wider than the other two, whilst the one at the top, which looks like a step on the side view is actually a hand-rail which is used by shunters when riding on the bottom step. I have omitted this detail as I found that it is hard to get at and its omission is not very obvious.

The side skirts are cut out next. These have a short section at each end bent at 45°. The line on the plan just near the hand-rail at each end is where the bend is. Make the bends, and file gently until the skirts just fit, as they sit against the step sides. Tack solder at one end, check for alignment, and then run solder along the back. File out the U-shaped opening where the tank filler cap comes. There is also a small hole (1/16in. drill) just above and to the left of the front bogie. On the plan the hole itself is not shown, but it is for the filler for cooling.

There is a jacking point on each side of the locomotive at the centre line of each bogie. Make these from code 70 or smaller rail. Cut four slots in the base of the rail with your jewellers saw, about ¼" apart. If necessary open these out so they will fit over the skirts. Cut off the end of the rail about 1/32in. from the last slot and file flat. Cut half way through the other side of the slot, and solder in place, using the length of rail as a handle. Cut off the 'handle', and repeat the process for the other three jacking pads.

The time has now come to fix the works into the body. In my model, the ends of the loco almost touched the rails, so I packed up the body 1/32in. by soldering in four small wire angles underneath the floor. The angles were bent up so as to hold the body centred over the works. I haven't arranged any fixing screws, and I probably won't — they are one of my pet hates! I just let the body sit there of its own accord. If you do this you will find it much easier to do oiling and general maintenance.

Next the couplers. I use Kadee, but no matter what type you use the procedure is much the same. Measure up from the track, mark out the shape of the opening required in the end, and drill and file it to shape. Then cut a piece of metal for a mounting plate to fit behind the end from one step to the other, and solder it in place. Assemble the couplers and fit them in place with screws. Remember if you cement them in place it may be wise to leave this for a while, as the cleaning down prior to painting may ruin the couplers.

The ends have more details — white discs are attached just to the right of the opening for the electrical connections. The coupler lift bar is bent out of wire and soldered in place. The white discs are best punched out of thin sheet metal. Find a 3/32in. diameter nail, cut off the head and file the end flat. Then file it 'U' shape with a small half round file. Lay the metal on the end grain of a wood block, thump the punch (nail) with a hammer, and you have your discs.

To fit the air hoses drill each end for six hoses, I used Cal-Scale. There are two above the 45° angle tab each side, and another two, fitted one above the other to the right of the coupler. Drill the holes for these but don't fit them permanently until after the cleaning down operation.

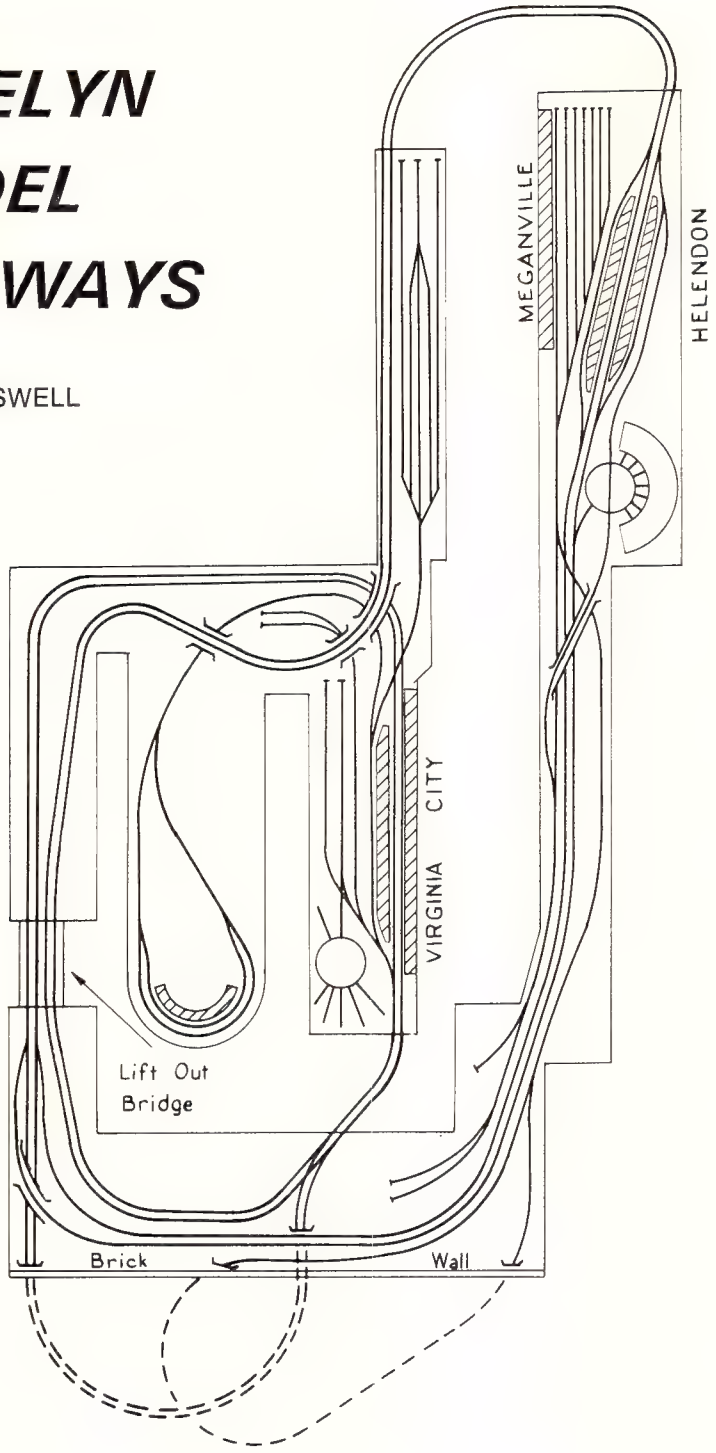
The stack is a piece of brass filed to shape and then soldered on, and the horns can either be turned brass or you can go to the nearest hobby shop and buy a pair, so much easier.

There are probably as many ways to fit handrails as there are modellers, and so if my system doesn't appeal to you, you will certainly be able to find another way. However, I find my way relatively easy, and it does give inconspicuous supports. You will need some hard brass wire, about 26 gauge, to use for all handrails and supports etc. Mark out on the hood sides the line of the supports. On the prototype the handrails are in sections, fastened separately to each section of the hood, and most are removable for servicing. For this reason there are quite a large number of supports, which I did not try to copy exactly. Instead, I placed a support every ½in. starting from the first pair, which I placed evenly on either side of the grille. Mark the positions for the supports, and centre punch lightly. Drill the holes with a No. 74 drill, or a size to suit the wire you are using, so that there is a slip fit. Sand clean and straighten some wire and cut off a number of 2in. pieces. Run these through the hood from side to side, and solder both sides from the inside. Cut off close to the hood each side, and then file to a uniform length. Do this by drilling a hole for the wire in a suitable thickness of brass, and use this as a filing gauge. I made mine long enough so that they came to the centre of the handrail. I then used a card spacer while I soldered the handrail on the top of the supports. This ensures that the support is not obvious when viewed from above, and incidentally it is easier to get the rail straight. I had no fear of unsoldering the supports from the hood during this

(Continued on Page 24)

JUNELYN MODEL RAILWAYS

by L. CROSSWELL



This layout has developed over a period of 20 years or more and resemblance to any prototype is merely coincidental. The naming of the layout is in memory of our eldest daughter, June; the terminal station, Meganville, after my wife, Megan; the largest through station, Helendon, after my second daughter, Helen; and the second through station, Virginia City, after my third daughter, Virginia. I may get a mention myself at some later date.

The whole system consists of a terminal station, two through stations and two country stations not yet named. In all, there would be 1,200 ft. of track. This is made up by two double track continuous circuits; two reversing loops, one for Helendon and one for Virginia City, both automatic in operation and are a great asset in stretching out running time.

Meganville, the terminal has its own yard and five coach storage sidings. Virginia City has a freight yard with six storage sidings. These yards can be operated without interfering with train movements between the other two stations on the main line.

Helendon has a 12-stall roundhouse and turntable made up of four Vollmer three-stall roundhouses joined together and Virginia City has an engine shed and turntable made up of two Triang sheds joined together and the turntable scratch built large enough to take a Rivarossi Y6b and the Rivarossi Berkshire.

Cab control is used and there are 11 different controllers to sectionalise the layout. By this means we can run as many as six trains together in any direction. At the through stations by means of a change-over switch we can control the station area and the yards with one controller and this eliminates any rough changing from one track to the other. This controller is fitted with a home-made Variwave.

I have speeded up a clock which registers one hour in ten minutes actual time. For any one train to traverse the whole layout in each direction takes roughly four hours by the clock. The reversing loops are a great asset in this movement. We try to keep the trains running at a reasonable scale speed and have never been driven flat out. The layout can have six operators but after that space becomes a problem. With sufficient space to move, ten operators could be worked.

Locomotives

There are 29 locos all in working order, numbered and painted according to its classification: green for passenger; red for freight; grey for mixed traffic; and black for shunting and banking.

In my opinion Fleischmann equipment is by far the most efficient and reliable and I have attempted to standardise on it. These units will move off without any trouble even after standing for long periods.

None of our locos or rolling stock is ever touched by hand unless an accidental derailment occurs. If ever we require a particular coach or wagon it is shunted out in prototype fashion.

Rolling Stock

There are well over 150 items of freight rolling stock, predominantly Fleischmann, and many different types of wagons make a colourful picture when made up into a lengthy train.

Passenger rolling stock number 35 coaches, mainly left in permanent rakes but can be uncoupled if need be.

There are no uncoupling ramps at any point on the layout as we uncouple by hand in all cases. This adds realism and rakes of wagons can be broken anywhere. We find Fleischmann coupling ideal for this purpose. A special tool was devised to uncouple and never misses.

There is no diesel power. Steam is here to stay although we do have one

(Continued on Page 21)

only Fleischmann 0-4-0 diesel shunter which will go under the axe shortly or be camouflaged for some other use.

Every loco and piece of rolling stock is numbered and a card made out for it. To make a train up, we deal out a certain number from the deck and make the train up accordingly. This keeps the yard operators on their toes, and varies the make-up of the trains.

Scenery is by no means complete. We have tried to portray the feeling of distance, and scenery consists mainly of open fields, paddocks and rolling hills. At one place the track disappears through a brick wall and trains can be held to add running time.

There are quite a few stiff grades. Most locos will handle the grades quite comfortably but some do require the assistance of a banker. This task falls to a Hornby 0-6-0 tank which cannot couple up to the rear vehicle of any train and just eases itself off when the grade has been topped, and the train continues on without stopping.

In laying the track we have fastened it down very securely to ¾ in. thick pine boards. This is the only way to have reliable and trouble-free running. Peco Streamline track is used with mainly Fleischmann points, crossings and double slips and there are a few Peco large radius points.

Power supply is from one 240/16V 10 amp transformer with four separate rectifiers. Illumination is in model form, most buildings being lit up. At the moment coaches are lit from the track but this is unsatisfactory and will be altered in the near future.

Buildings are a mixture of Faller, Kibri and various kits. Figures and animals, etc., are a mixed lot.

My youngest daughter is a great companion and can operate this layout quite efficiently. She attends to her own station while I work the remainder. On occasions we have a field day for friends to join in and try their hands at operating. It all appears very complicated but really is very simple. The sight of approximately 120 section switches frightens most but the greater number of these are only there if required. Points are all electrically operated by the Pencil method and any route can be made in a split second from the diagram without even looking at the tracks themselves. At a later date I intend to put master switches in to over-ride individual control whereby I can make any number of routes by means of one switch.

The Pencil method of controlling points I find very simple and convenient. Although not quite prototype it saves quite an amount of labelling or remembering which switch controls which set of points. As there would be about 40 sets of points in the layout, identification of each one could be difficult.

I am of the opinion that our layout would be the largest private one in Tasmania, but could not say if this applies in any mainland state.

BULLETIN OF THE SYDNEY MODEL RAILWAY SOCIETY

ANNUAL GENERAL MEETING

After several postponements, due to the petrol strike and illness amongst officers, the 32nd Annual General Meeting of the Sydney Model Railway Society was held on August 12, 1968, in the club rooms. The President, Paul Simpson, read the minutes of the previous meeting, as Secretary, John Bowen, suffering badly from flu, could not use his voice. After the usual reports, followed discussion about the venue for the coming Christmas night, and it was decided to follow past procedure.

The election of office bearers resulted:

President: Paul Simpson.
Vice-Presidents: Don Stone ('O' gauge); Lionel Glendenning ('HO').
Secretary: John Bowen.
Treasurer: Ken Smith.
Librarian: Arthur Hall.
Auditor: Arthur Wheatley.
Reporters: 'O' Max Mitchell; 'HO' Barry Milner.
Running Committee: 'O' Don Stone and two others; 'HO' Lionel Glendenning and two others.

President's Report

We have welcomed six new members to the society, they are:

G. Wells, Epping.
D. Glendenning, Lane Cove.
M. McCormac, Lane Cove.
R. Gallagher, Mascot.
M. Hughes, Glenbrook.

Who are all 'HO' gauge modellers, and in 'O' gauge:

J. Hampson, Pennant Hills.

A warm welcome is extended to these members.

We look forward to Don Stone's return to active membership after his operation.

We have completed converting the 'O' gauge third rail from wire to code 100 nickel-silver rail. The conversion having become necessary to eliminate the possibility of derailments and the subsequent repairs. It appeared that this would give the members some practical first-hand knowledge of track-work. However, finishing the job was left to two or three members. It is hoped in the near future that time-table operation will be resumed. To those persistant workers on the 'O' gauge layout I extend my thanks, and call on the rest of the team to make a maximum effort in the future.

As well as new track-work, the 'Junction' panel and diagram have been rewired, to show track-lights and signal repeaters. This task was completed by John Alexander, who also got married this year.

It is encouraging to see progress and co-operation on the 'HO' gauge layout. Of particular interest is the number of Epoxy-moulded components and models including BCW, LLV, MRC, SHG and MHG vehicles. It is very good to see a long string of vehicles rolling around the layout.

Finally, I wish to thank all the officers and members who have attended and helped during the year, with special thanks to the Secretary, John Bowen, and Treasurer, Ken Smith. Thanks also to the train-running committee under Lionel Glendenning.

Thank you,
Paul Simpson (President).

Current News: 'O' Gauge—8 HEL.

One of our new members, Jim Hampson, has built some low hills behind Delec, improving the depth of field and also obscuring the 'Junction' operator's head from view. The sky above 'Junction' has been painted to blend in with the hills. Installation of the third rail and associated point-work has now been completed, and 'Central' is the next object of attention.

Ted Davies provided a 35 class loco for a test run.

A recent visitor was Tony Hough from Brisbane who showed us three very fine models of Great Western Railway prototype, built by Ian Norman. These were an 0-6-0 Dean goods tender engine, a six-wheel radial goods van, and another six-wheel radial, this time a First/Third composite passenger coach. The workmanship in these models is superb, particularly the radial axle arrangement which gives very smooth running on curves, and through complex trackwork.

MODEL RAILWAYS (formerly the Stoker)

The monthly N.Z. model railway magazine that covers all prototypes and scales with a bias towards N.Z. prototypes and Sn3½ scale (3/16in. to the foot). Available in New Zealand from all hobby stores and booksellers and in Australia from some hobby stores. Also direct from the publishers on a subscription basis. Individual copies 20c (N.Z.), 30c (Aust.). Subscriptions, N.Z. £1 p.a., elsewhere £1.2.6 (N.Z.) p.a.

Subscriptions include postage and there are 11 issues per year. Trade enquiries in Australia to Australian Model Craft Co. Send for a free sample copy without obligation.

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ALL CURRENCIES ACCEPTED AT CURRENT RATES OF EXCHANGE

CPH RAILMOTOR

By G. A. Kahler

"Introduced during the 1920's to revolutionise country Branch Line Services, these were the third type of Railmotor built in N.S.W. All told 37 of these "CPH" or "TIN HARES" as they are known were built. About 30 remain in service today. Later 5 Trailers code "CTH" were built to run with the "CPH's". A short history of "TIN HARES" was given in an article on Railmotors in N.S.W. in the March-April 1967 issue of the A.M.R.M.

Now for construction of one of these. The method described here is for H.O. (3-5 mm. Scale) but can be used to produce any light weight self propelled set of up to four cars in most scales.

The Body

Mark out the sides and ends on a suitable material of your choice. I used 1/16" balsa, but card is preferable. Sheet Styrene would be even better.

Carefully cut out the sides and ends including the windows and doors. Now bend the end Sections to shape, then add, by gluing, 2 thin pieces of card (or Styrene) to the back of all pieces (two sides two ends). Cut out the windows in this second sheet making sure to leave an equal amount around all edges to represent the window frame. Leave doors in (i.e. don't cut them out of the second sheet), but cut out the windows in the doors. Mitre the end edges of each part with a small flat file, so that you will obtain a neat fit at the corners, then glue all sides and ends together. For bracing, I recommend that you fit a coiling made of 1/16" balsa inside the top of the body, so that the balsa is flush with the top of the sides and ends. Make sure to cut this ceiling, to the same shape as the body. If necessary small pieces of card can be placed across the middle of the body in a vertical position to prevent any weakness in the middle of the sides.

The Roof

Firstly fit a piece of 1/32" balsa, similar in shape, but slightly larger all around, atop the body, allowing equal overlap on both sides and ends. The main part of the roof can be shaped from 2 pieces of ¼" balsa, cut to the same size as the piece of 1/32" balsa just fitted. To shape the roof, file the balsa steadily with a flat file until you have the required shape, then give atop the 1/32" balsa sheet.

Detail

The detail can be made from scraps. Straighten wire "Paper clips", then bend to the required shape to form the air piping. A good photo of this detail is of real benefit to the modeller. The radiator can be made from balsa. The small air-tank behind the headlight, on the air cooling system is made by giving the head of a household pin atop the head of a panel pin (nail), the tail of the latter being bent at right angles to sit along the roof. Remove the point of the nail, then butt a piece of wire against the nail to form the continuation of the pipe. Make all other pipes from this wire. Ventilators are household pins; the main air-intake vent is the top of a nail, while the exhaust pipe is the bottom of the same nail. The headlights are "Sentinal C.38 type" mounted on the roof, by filing back the support, at the back of the light, and on a bent wire staple at the front. Above the drivers cabin window (centre each end) is a sun shade which is shaped from balsa and glued on. Add 3 marker lamps each end (Sentinal productions). The hooter is a small nail. Air hoses are fine plastic covered wire. Don't forget the handrails each side of the doors (fine copper wire) and door handles (wire staples).

AFTER PAINTING the outside, add "glass" behind the windows. This can be made from celluloid strips.

Frame

The frame is made from 1/16" balsa cut similar in shape to the body but slightly smaller. Add to each end, on the underside, a small piece of 1/16" balsa as far back as shown on the plan. Detail can again be made from scraps. (Battery boxes and imitation engine) balsa; cowcatchers — balsa or balsa and wire, Air hoses — plastic covered wire; Coupling hooks — wire, Buffers can be bought.

Motorisation and Bogies

These may be of your own choice. I used Tenshodo Diesel Loco Bogies. If you do use Tenshodo Bogies, then use a Tenshodo Motor that goes with it. This arrangement may seem too powerful, but I have tried other smaller motors with these bogies without success. Alternatively, you may use a belt drive, which I have done in a similar 2-car Diesel Railcar Set.

Here I used a Pittman motor and belts driving the bogie axles. This arrangement, I feel, would be particularly successful in a Railmotor.

Painting

Apply two coats of balsa (or sanding) sealer to all parts unless you are using Styrene sides. Paint the roof with RED LEAD PRIMER (not Pink Primer) and leave at that. Paint the body TUSCAN RED and line out with Signal Yellow. Do the lettering with the same yellow.

Headlights, Radiators, Frame, Bogies, Cowcatchers, main air hoses and hooks are all black imitation engine — grey, greased black; Toilet window pale blue, small air hoses — white, marker lights — two top — Red Lamp; Bottom one: — white or yellow lamp.

Finishing

Mounting the body on the frame should be kept as simple as possible. Screwing the body to the frame is not recommended. Place small blocks of balsa and top the the frame so that the body is a snug fit over them. This is amply sufficient to hold the body on.

A trailer car, Code CTH Nos 51-55, may be made similarly but leave off: — All roof detail except the ventilators, all detail from one end only except air hoses. DO NOT fit engine or any ventilation piping and fit only one cowcatcher.

Fit buffers if required. They do finish the model. Screw type couplings look best and these can be easily made from wire for hooks and small brass connections.

Now your Railmotor is ready for traffic and another railway will obtain an improvement in its service.

Sydney Model Railway Conference 1969

VISITORS FROM ALL EASTERN STATES . . .
Hope to see you there.

Further information:
P.O. BOX 107
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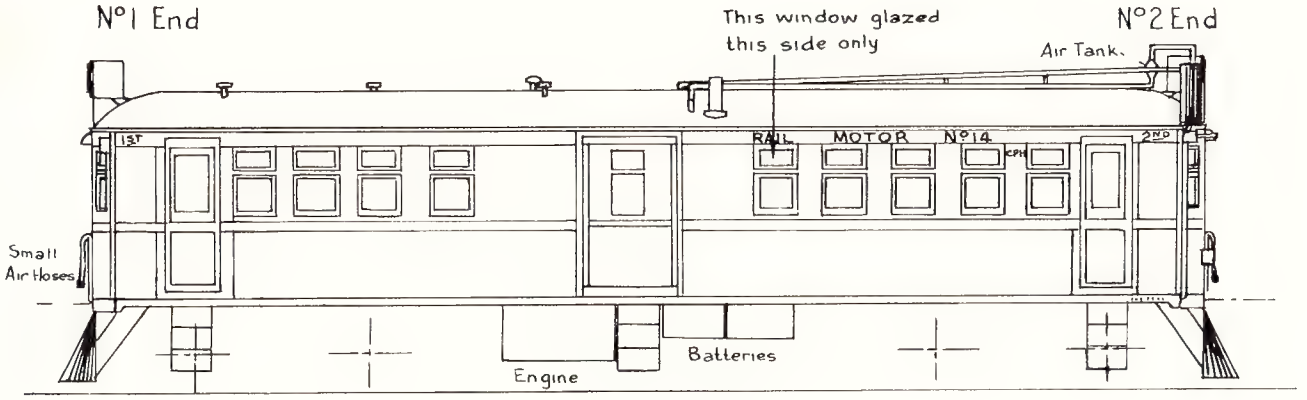
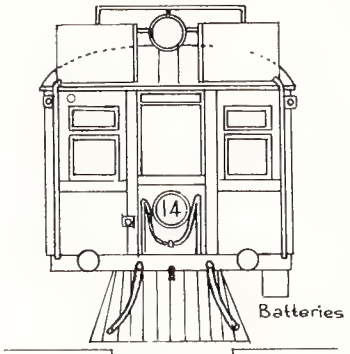


ELEVATION



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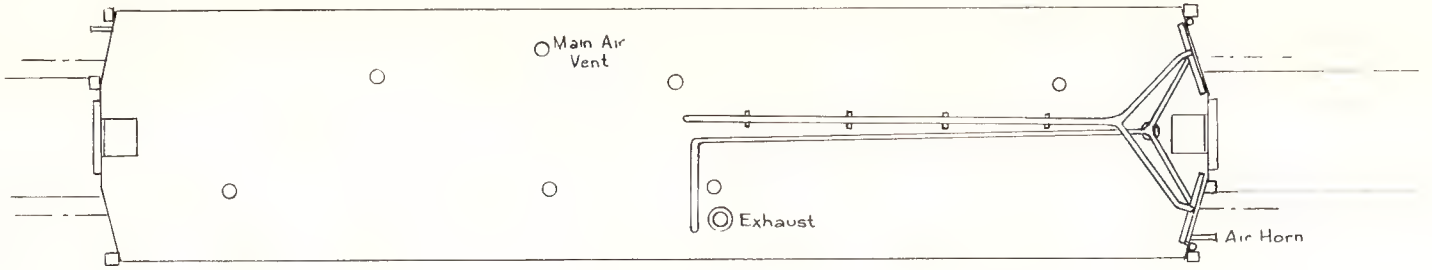

PLAN

Scale
3·5 mm to one Foot

NEW SOUTH WALES RAILWAYS 4'8½" Gauge	
RAIL MOTOR	
CODE CPH	
Drawn: G.K. 2·8·1968	SCR PUBLICATIONS PLAN & PRINT SERVICE

MODEL 'T'

from page 19

operation, because the solder on the other side of the hood could not possibly melt. After both handrails are done, cut the wires going across inside the hood.

The other handrails are a bend to fit job, but as the finish of the model depends on the quality of the detail work, take your time. I drilled holes in the end of each hood, and the ends of the cab, where the short sections of railing go, but all the other joins can be made by soldering the wire directly to the flat metal.

By now you will have found that the bogies as bought, won't fit into the body. As a first step to modifying them to look more like the prototype, saw off the brake shoes. This will make a surprising difference and with a coat of matt black paint you could probably find few people would notice them, but just in case you want to know the conversion, I will tell you how it's done in the next issue. We will also do the painting then, so take your time and you will have a good model to enter in the competitions at the Easter Convention.

CLUB CAR

Club Secretaries are reminded that space in this column is available free for details of your club.

NOTICE

A group of people are intending to form a model railway club in the eastern suburbs of Sydney, and would like to hear from other modellers in the area, who would like to help in the construction of a layout. The availability of a suitable building for the layout will be a problem, and anyone who can help in this regard will be most welcome. For further information please contact: John J. Bevan, 46 Thorne St., Edgecliff. Phone 32-1000.

SCMRA

The Southern Cross Model Railway Association is an Australian-controlled organisation affiliated with the NMRA of the U.S.A. It has branches in most States, and membership is not restricted to followers of any particular prototype. Membership dues are $4 per year with a $2 joining fee. For further information please write to the Secretary, Terence N. Carpenter, P.O. Box 107, Lakemba, N.S.W. 2195.

DIVISION REPRESENTATIVES

N.S.W.: John Bevan, 46 Thorne Street, Edgecliff. 2027. Telephone (02)32-1000.

Coming meetings: January—No meeting will be held.

February 8—A visit to the SSME.

March 8—John Casey, 3 Tayol Street, Narrabeen. 2101.

Queensland—Max Chaseling, 10 Merlin Terrace, Kenmore.

South Australia—John Trelease, 7 Milton Ave., Fullarton. 5063.

Victoria—Jim Wilson, 37 Potter Street, Black Rock. 3193.

WESTERN RAIL ASSOCIATION

The Western Rail Association wish to advise that they will be holding a Model Railway exhibition over the Anniversary Weekend, January 25 to 27, 1969, at the Melrose Hall, Emu Plains, on the Great Western Highway about 1½ miles west of Penrith.

Should any club or society wish to visit the exhibition as a group please write to the Secretary saying how many persons will be expected to visit, and we will try to arrange transport from either Emu Plans or Penrith Railway Stations. The Secretary's address is B. Moffat, 9 Lagoon Drive, Blaxland, N.S.W. 2774.

FLINDERS MODEL RAILWAY SOCIETY

Secretary: Keith Nelson, 580 Blackburn Road, Mt. Waverley, Vic. 3149. Telephone 560-9828.

The FMRS is a group of enthusiasts who meet once a month at members' homes. As the name implies we are basically modellers, although we have started work on the restoration of an 0-4-02 saddle tank sugar cane loco at the Menzies Creek Museum for the Puffing Billy Society.

Our annual meeting will be held on February 1, 1969, at 2.30 p.m. at the home of Laurie Binns, 16 Strathmore Street, Bentleigh, Vic.

COMING EVENTS

●

EASTER FRIDAY—MONDAY

SYDNEY, N.S.W.

Sydney Model Railway Conference
Open to all railway modellers.
Headquarters: Carlton-Rex Hotel,
Registrations to P.O. Box 107,
Lakemba, N.S.W., 2195.

●

N.S.W. ROLLING STOCK CODES

This publication is a "must" for any modeller who contemplates following N.S.W. prototype. All goods vehicles as at 1st September, 1968.

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KINGS CROSS. 2011

Other News from "THE DOCKYARD" ...

Those HO gaugers who missed out on the first run of Balboa's Alco-G.E. 2000 H.P. Diesels will be pleased to learn that further production will be spread over the coming months. Already, we have a second lot of S.P. 'Daylight' A Units @ $63.45, whilst the Power Conversion Kit, to enable motorisation of the B Unit, is now in stock @ $20.60. Some B Units are also still in stock @ $27.55. Heralds to come will be Santa Fe, Union Pacific, New York Central, G.N., S.P. Gray, Pennsylvania, D. & R.G.W. and Missouri Pacific. Simultaneously, due to their success, the range of full-length, streamlined Passenger Cars will be re-run to build up fast depleting stocks both here and in the U.S.A. In addition, a full Baggage Car, without R.P.O. section, will be added in all heralds @ $17.70 . . . . Our stocks of Tenshodo's fine G.N. 2-8-8-0 'N-3' Loco. @ $270.30 have been followed by a second new model from this plant: The G.N. 4-8-2 'P-2' @ $130.00. Both models painted and lettered . . . . Recent arrivals from 'United' include a very few of the V. & T. Modernised "RENO" Loco. @ $47.00 . . . . New items from Kadee include: MKD-11 'Old Timer' Couplers @ $1.80 per 2 pr., MKD-16 Couplers for Buffer Equipped stock @ $1.50 per 2 pr., 502 Bettendorf Truck Set with mounted MKD-4 Couplers @ $2.75 per pr., 503 Arch Bar Truck Set with mounted MKD-4 Couplers @ $2.75 per pr., HO Track Gauge for Codes 100 & 70 Rails @ 90c ea., HOn3 Track Gauge for Codes 70 & 55 Rails at 90c ea. and for N scale fans—MT-5 Couplers @ $1.80 per 2 pr. and Per-mag. Uncouplers @ $1.80 per pair . . . . Long out of stock, Balboa's HOn3 R.G.S. Reefer Kit is again available, along with repeat runs of many of the popular HOn3 Car Hardware Sets. New in the latter series come No. 1018 Plain Brass Knuckle Couplers, per set of 4 @ $1.60 and No. 1019 Brass Balloon Stack @ $2.10. For HO fans, Balboa have added No. 1020 Brass Clam-shell Stack @ $2.50. The new 4th Edition Colour Catalogue is also in @ $1.95 per copy. This shows the full range of Balboa's HO and HOn3 brass locomotives and rolling stock, plus many new models to come in the time ahead . . . . In N scale, 'SEKISUI' recently delivered re-runs of the 40' AAR Box Car @ $2.95 ea., 50' Flat Car @ $2.55 ea., 40' Cattle Car @ $2.95 ea. and Bay Window Caboose @ $3.60 ea. Several new heralds are involved, whilst a 50' Auto Car and 50' Plug-door Box Car are promised for the future. For a complete listing of relevant heralds, plus a coverage of the balance of the range, send a large stamped S.A.E. With production of the N.Y.C. 'J3a' 4-6-4 Hudson Loco. in hand as these notes are being written, we are hopeful of having our first stocks on the water, if not on our shelves, by the time this appears in print.

THE MODEL DOCKYARD Pty. Ltd.

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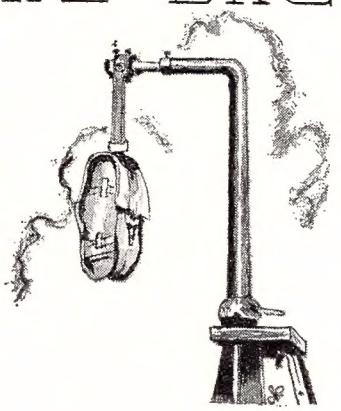

Sir,

Having just received one of your diagrams of Emu Bay 4-8-0 locomotive, I wish to make a few comments.

In my collection of G.A. blueprints, of official production, and many others, obtained from various sources, I have never before seen such a diagram as this one, as it incorporates a plan view! Words nearly fail me.

I am very pleased to have this diagram of a rather historic locomotive class, which is based upon designs of Dugal Drummond and Jones. Typical of their designs for the Caledonian, North British and Highland Railways; in this case with modern details.

The draughtsman N.C. is to be complimented, I consider this to be a valuable addition to my collection.

LESLIE POOLE

East Malvern, Vic.

Sir,

For some months now I have been attempting to buy various items necessary for the scratch-building of rolling stock. I have placed orders with my local hobby shop, which I believe to be a reputable organisation, and one which I have found to be most helpful to me. However, I do find that the delay in obtaining items necessary for scratch-building such as bogies, mechanisms and even some materials to be so great as to be almost beyond belief.

In true Australian manner I have tolerated this situation in the belief that the smallness of the local market meant that we in this country were just being put aside in preference to more lucrative markets elsewhere. Now I am beginning to wonder just how true this is, as recently we have seen a big expansion in the range of locally produced equipment, but these are only available in a few places and not even in all the bigger hobby shops. There have been complaints in the past that locally produced equipment would not have a market; yet we now have the situation where the equipment is being produced, but not being distributed. How do manufacturers expect to sell their products when they don't make them widely available so that modellers who prefer to browse and buy instead of buying sight unseen by mail can do so?

I realise that modellers in some country areas may be forced to buy by mail, but I cannot see why, living in a city of over two million people, I should have to buy my requirements in this way. Similarly, I feel that in the larger country towns which have groups of railway modellers, the local hobby shop would stock Australian manufactured equipment —if they could get it.

Recently, on a trip to another city, I was able to obtain articles which I have been trying to get for some time. Yet strangely many of the locally produced items I have seen in Sydney were not available. This obviously indicates something is wrong with the distribution system of the local industry. Or is it that local stores will not support interstate manufacturers? To support local industry is fine, but why should I be prevented from buying from these people, through a hobby shop? Surely the wider distribution of model railway equipment of both Australian and overseas manufacture would do nothing but good for the hobby.

I would like to hear what other modellers who have experienced similar difficulties have to say on this subject.

JOHN G. BECKHAUS

Mosman, N.S.W.

Sir,

For many years I have been in the Model Railway hobby, yet I am astounded at the amazing lack of local scale railway kits available.

It appears to me that the main distributors in this country are only interested in dollars and cents, and pushing "Yankee" and "Pommy" railways on to everyone. Personally, I feel we have had enough of this influence otherwise, without it creeping into this hobby.

Many hobbyists feel that prices are exorbitant, but if our supplies were made in this country we would not have a high import duty to pay, and this in turn would bring the hobby into everyone's price range.

As an example, one of the local suppliers marketed a NSWR class AD60 Garratt at $140. Recently an advertisement in your magazine quoted a price of $175 for the same article. This must show that these locomotives are in demand yet, on making inquiries, I was told that no second run was contemplated. For how long do we have to pay almost "blackmail" prices for our equipment?

How many other enthusiasts feel that our local distributors should take an interest in our local railway scene?

T. J. ALLAN

Melbourne, Vic.

Sir,

I am a new modeller and would like to specialise in the New South Wales Railways. I have very little rolling stock at the moment and I have been interested to read in the last few editions of your magazine, references to models of local prototype.

I would like to know who will be handling these models and where I can obtain them, not necessarily in Wollongong. I would not mind them being in kit form as I enjoy assembling things.

F. I. BARRETT

Wollongong, N.S.W.

Sir,

I have been very disappointed at the response for Australian prototypes in 'N' scale. Mostly modellers would like to have a brass locomotive of an Australian type, but for a pinch of a price. I had the intention of putting in the market a dozen or so NSWR 36 class locos for about $87. These were to be all brass with full valve gear. One person wrote me saying he was interested, but he thought the price was about $50 too high. So the whole project has fallen through, including plans to produce rolling stock in conjunction with a Japanese manufacturer.

Why won't people realise the work that is involved in the production of these models?

I receive many orders from the United States of America, where people are prepared to pay $150 or more for one little brass engine. I reckon that the Americans have more value for models than Australians will ever have.

PAUL VAN LEUVEN

Brisbane, Qld.

Sir,

At the recent Sydney Model Railway Exhibition there was much discussion about the non-availability of model railway kits of local prototype. May I be permitted to use the space of your correspondence column of your magazine to put the position of the local manufacturer?

On present estimates it would appear that a particular model cannot sell more than about 500 units on its initial release. Discussions I have had with various distributor organisations leave me no option but to believe that they are not interested in handling this quantity. He wants to see sales figures in the thousands, as only then can he show a healthy profit at the end of the year. Some readers may think then that the simple answer is to produce a few thousand kits and the market is assured. But what would happen?

Assuming that the distributor does take the kits and spreads them around his market, it is likely that, because the kit has been designed for the scale model market rather than the toy trade, the item will not sell in the quantities he desires and so he will not take any more of the product. When this occurs the hobby suffers—not because of the product being of poor quality, but because the distributor did not realise the limitations of the market.

The only alternate to this is for the manufacturer to do his own distribution, but this costs money, and many retailers are not prepared, or they do not seem to be, to do business with anyone but the established distribution organisations. I could quote many examples of personal experience on this matter, but this letter would become extraordinarily long, but I do feel that your readers should know some of the problems which face the manufacturer of model railway equipment in this country, and in doing so explain to them why they cannot get the goods which they are obviously needing.

J. PURCELL

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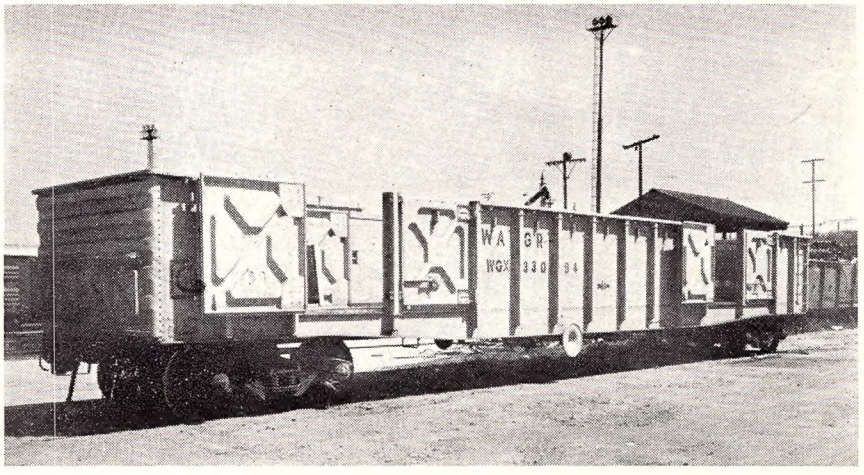

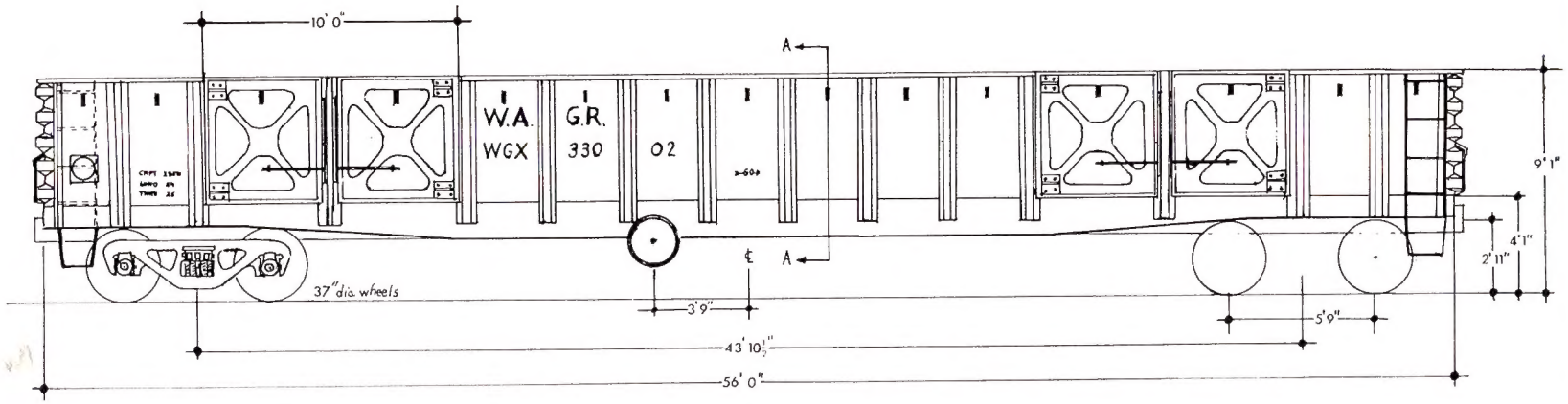

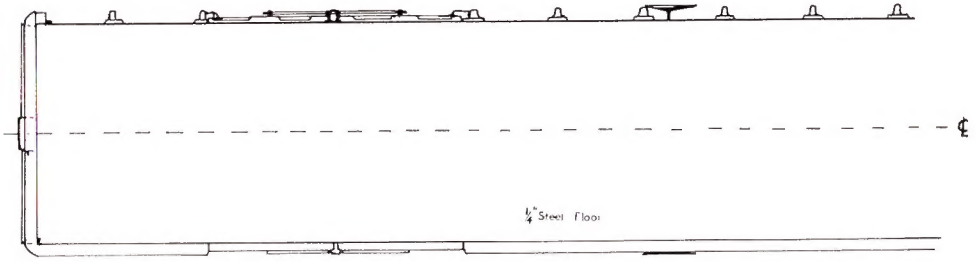

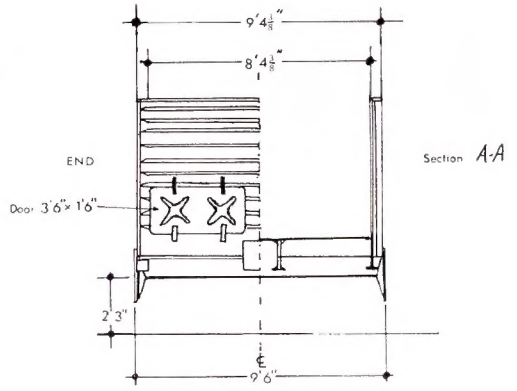

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